JPL D-11119

OFFICE 507

ELECTRONIC PARTS ENGINEERING

ALERT/CONCERNS HANDBOOK

51-A-02
Revision A

February 1997

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JET PROPULSION LABORATORY

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Revision A

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FOREWORD

This Handbook was developed to improve the visibility and understanding of the JPL Alert/Concern System. It captures the processes and guidelines that will help JPL personnel use the technical problem information provided from other users of aerospace equipment.

The JPL Alert/Concern System (ACS) is based upon the NASA Alert System which provides for the immediate reporting between NASA installations on identified failures, malfunctions, and unexpected degradation or contamination of parts and materials obtained from manufacturers or other suppliers. Both systems also provides for the distribution of safety reports (Safe-Alerts) which describe potential personnel and property safety problems and hazards.

An important purpose of this system is to establish a standardized method to alert JPL project offices, safety offices, quality assurance and reliability and other appropriate offices of problems associated with:

- Mechanical, hydraulic, electrical and electronic parts, microcircuits, and microcircuit modules,
- Materials associated with the above, such as, ferrous and nonferrous metals, plastics, sealants, lubricants, insulations, wire, solder, fluxes, shielding, and hydraulic fluids,
- Materials used in aerospace structures,
- Safety problems or hazards.

An equally important purpose of the ACS is assure that the issues are addressed and actions taken when appropriate. This process is closed loop in that it provides for:

- Dissemination of Alerts to projects and other organizations and individuals who may be affected
- Certification that such Alerts have been identified to the appropriate offices
- Documentation of the responses, by the appropriate offices, to the Alerts, and
- Periodic reporting of the status of each Alert.

This system also provides for utilitarian aspects, such as, relationships to other reporting systems, forms, training material, and the preparation of a variety of reports. This procedure is in conformance with JPL SPI 7-01-14, "Alert/Concern System," dated April 1, 1984.

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1.0 INTRODUCTION

The Jet Propulsion Laboratory (JPL) participates in the NASA Alert System to alert project offices, safety offices, quality assurance and reliability and other appropriate offices of parts, materials, process, and safety problems. The NASA Alert System provides for the immediate reporting between NASA installations on identified failures, malfunctions, and unexpected degradation or contamination of parts and materials obtained from manufacturers and other suppliers. Interchange of such information with other government agencies and contractors is also provided through the Government-Industry Data Exchange Program (GIDEP). The Alert/Concern System is the focal point for the exchange of this information at JPL. The JPL Alert/Concern System not only acts to collect and distribute this information but also tracks the closure of significant problems with projects and the Safety Operations Section.

1.1 Purpose

The purpose of this handbook is to clarify the operations and uses of the JPL Alert/Concern System. The purpose of this system is to provide a controlled method of reporting and documenting problems, failures, anomalies, and incidents that occur during all development phases of project hardware and software which could impact other JPL projects and tasks. Organizational responsibilities are described separately in SPI 7-01-14.

1.2 Scope

The Alert/Concern process is defined as the internal JPL system for:

- The timely identification of JPL technical problems which may be applicable to other JPL programs, projects, and tasks.

- The receipt and processing of Alerts, Safe-Alerts, Problem Advisories, and Agency Action Notices from NASA and GIDEP

- The timely notification of project and task managers of Alert/Concerns that potentially could impact their hardware

- The follow-up procedure for projects and tasks to assure closure

- The processing of JPL Alert/Concerns appropriate for external distribution,

- The periodic reporting on the Alert/Concern activities

1.3 Applicability

This procedure applies to all elements of the Laboratory involved in the design, fabrication, test, and operations of flight hardware and software activities. It applies to programs, projects and tasks managed from all program offices, the technical divisions in their implementation, and in Mission Assurance related activities. Included is the identification of problems which occur during fabrication, integration, test, and operation of spaceflight hardware and software.

1.3.1 Applicable Documents

The following documents are applicable to the extent they referenced herein.

NASA

NMI 1270.3	NASA Quality Management System Policy (ISO 9000)
NMI 2110.1	Foreign Access to NASA Technology Utilization Material
NPG 8735.TBD	Procedures for NASA Alert Reporting of Parts, Materials, and Safety Problems

Other U.S. Government

DoD form DD1938	Alert form dated FEB 90 (see appendix A)
S0300-BT-PRO-010	GIDEP Operations Manual
S0300-BU-GYD-010	Government Industry Data Exchange Program (GIDEP) Requirements Guide

JPL

Policy 4-11	Reliability and Quality Assurance, dated June 30, 1983
SPI 4-11-5	Problem Failure Reporting, dated April 28, 1989
SPI 7-01-14	NASA Alert System, dated April 1, 1984
Form AC-100X	Alert/Concern Submittal (see appendix A)
Form JPL 0979	Alert Recommendations (see appendix A)

1.4   Terms and Definitions

1.4.1 Definitions

The definitions of the following terms apply to their usage in this document.

Closure   The review of an Alert/Concern by a project or task organization to determine applicability to their activities (design, procurement, build, test, operations, etc.), establish an action plan when the Alert/Concern is applicable and notifying the Alert/Concern System when the issue is resolved.

Concern   A Specialist's decision that an Alert/Concern is likely to be applicable to current activities of JPL project or task organizations and is an operational risk.

No Concern   A Specialist's decision that an Alert/Concern is <u>not</u> likely to be applicable to current activities of JPL project or task organizations and is an operational risk. The problem could be an issue to future projects and Safety Operations Section.

Operational   The problem identified in an Alert/Concern could result in mission failure or
Risk   degradation or result in a safety hazard.

1.4.2 Acronyms

Acronyms used in this document are defined in appendix B.

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2.0 ALERT/CONCERN SYSTEM OVERVIEW

The JPL Alert/Concern System can be viewed as an element of the NASA Alert System with specific additions to support internal JPL projects and tasks. JPL has and will continue to use the NASA Alert System for problems identified by external organizations. In some cases, JPL will submit selected JPL Alert/Concerns to the formal NASA system when they meet the defined NASA criteria.

2.1 Relationship to NASA Alert System

The NASA Alert System is basically an inter-Center problem information exchange program in which each Center reviews incoming Alerts against their own programs and notifies the other Centers and GIDEP of problems they experience. Guidelines for participation in it are contained in NPG 8735.TBD, Procedures for NASA Alert Reporting of Parts, Materials, and Safety Problems.

2.2 Relationship to GIDEP

One of the requirements of the NASA Alert System is that each Center participate in the Government Industry Data Exchange Program (GIDEP), which is a cooperative, user-oriented reporting system composed of more than a thousand companies and government facilities. JPL became a member of GIDEP in 1970 when NASA joined the previously DoD only organization. GIDEP, seeking to use the NASA-developed Alert reporting system, agreed to provide the cataloging and distribution of Alerts. Further information on GIDEP is available from the JPL GIDEP Representative at X4-8556 or from the GIDEP Internet home page at http://www.gidep.corona.navy.mil/.

2.3 Relationship to EPINS

The Electronic Parts Information Network System (EPINS) is a comprehensive electronic parts information and acquisition tracking system maintained by Office 507. The Alert/Concern System uses EPINS to make available summaries of Alert/Concerns including NASA/GIDEP Alerts and Safe-Alerts since 1987. The responses from Specialists and projects are captured and the system is used to assure timely closure. It is possible to use the system to search Alerts for individual part numbers or manufacturers or to perform more complex comparisons of project parts lists and Flight Stores lists to Alerts based on generic or detail part numbers. For Internet access by JPL personnel, connect to URL http://nppp.jpl.nasa.gov/dmg/jpl/loc/507/clas/cla-syst.htm. Further information on EPINS is available at X4-7015 or X4-2580.

2.4 Relationship to Other JPL Problem Reporting Systems

The Alert/Concern System utilizes several problem reporting systems within JPL as source of information that should be distributed to other projects and NASA.

2.4.1 Problem/Failure Reporting System

The JPL P/FR System already captures problem information for most projects but is only responsible for assuring that that specific project close out its own problems. To improve the dissemination of pertinent problem to other projects, the JPL P/FR form (Form JPL 1846 1/87) has been modified to identify inputs to the Alert/Concern System. The modified form will ask for the assessment of the problem/failure against the submittal criteria, and if applicable, some information relative to the submittal. This assessment would be made during the initial submission of the P/FR (section I) and at final closure at the Section level (section III) and then a copy of the P/FR will submitted to the Alert/Concern System. Further information is available at X4-9282.

2.4.2 Inspection Reports/Quality Assurance Alerts

The JPL Quality Assurance Alert is to advise the various JPL QA disciplines of significant hardware problems, concerns or actions, likely to affect similar areas within their activities. They commonly are the result of an Inspection Report on some activity at JPL or its contractors. The QA Alert is intended as an inter-quality assurance organization communication and not for wide publication. The QA supervisors review the QA Alerts and those released are copied to the Alert/Concern System for possible distribution to the projects or to GIDEP as Problem Advisories or Alerts. Further information is available at X4-3607.

2.4.3 Parts Failure Analysis Reports

The failure analysis, construction analysis and destructive physical analysis reports performed by the Electronics Parts Engineering Office are submitted to the Alert System Engineer for review as candidates for submittal to the projects or to GIDEP as Problem Advisories or Alerts. Further information is available at X4-3188.

3.0 ALERT/CONCERN PROCESSING

The overall Alert/Concerns system operation is depicted on the flow chart, appendix C. The paragraphs below delineates the associated procedure to be followed.

3.1 Submittal Criteria

JPL Alert/Concerns should be submitted for consideration by anyone who experienced, found, and/or investigated a technical problem which resulted in failure or out-of-specification performance and can reasonably be expected to be repeated on other projects or tasks.

a. <u>WHAT PROBLEMS TO SUBMIT</u>:

1. A problem occurs even though the use of the product of process is within the limits of the controlling document or guideline.

2. A problem occurs when the application is out of specification limits but engineering judgment predicted acceptable performance

3. A hardware problem that is caused by the use of processes, procedures, and/or materials.

4. A software problem that is caused by the use of standard modules, subroutines, protocols, etc.

b. <u>WHAT NOT TO SUBMIT</u>:

- A problem which is caused by personnel, delivery, contractual, or financial matters.

- A problem due to blatant violations of manufacturers guidelines or specification limits.

- A problem caused by obvious mishandling or operator error.

- A problem which is caused by a single application of a unique one-of-a-kind design.

- A problem which is caused by a unique application of a generic process, material, or part.

3.2 Submittal Process

The formal submittal or identification of a JPL Alert/Concern can be accomplished by one of four methods. The first method uses the existing P/FR system and is accomplished during the normal P/FR process. The second method is directed to those problems which are identified as the result of the closure of Inspection Reports, Material Review Board actions, or similar activities not under P/FR

control. This system uses the existing Quality Assurance Alert form. The third method relates to specific parts analysis activities with Electronic Parts Engineering Office. The fourth method uses a new form to cover special cases not covered in the above. This covers cases such as a materials evaluation test, special test of mechanical hardware, software development problems, etc. The following sections summarize the basic procedures for each of the four methods.

3.2.1 JPL Alert/Concern Submittal Using the P/FR Procedure

The JPL P/FR System already captures problem information for most projects. To improve the dissemination of pertinent problem to other projects, the JPL P/FR form (Form JPL 1846 1/87) has been modified to identify inputs to the Alert/Concern System. The modified form will ask for the assessment of the problem/failure against the submittal criteria, and if applicable, some information relative to the submittal. This assessment would be made during the initial submission of the P/FR (section I) and at final closure at the Section level (section III).

It is recognized that the level of data available during completion of section I of the P/FR may be incomplete. However, in order to assure timely dissemination of significant information and data to other projects and tasks, the potential for a JPL Alert/Concern must be a consideration. Until a revised JPL P/FR form can be prepared, the existing form will include a hand stamped question, in section 1, requesting either a "yes" or "no" as to the potential for the JPL Alert/Concern and copies of the criteria will be distributed to Reliability personnel.

The present JPL P/FR form requires that, in completing section III of the form, the cognizant Section respond to the question on line 19 as to whether the subject P/FR should be considered for submittal to the Alert/Concern System. The instructions and submittal criteria for this line of the P/FR will be contained in the P/FR Checklist form.

3.2.2 JPL Alert/Concern Submittal for Quality Assurance Alerts

There are instances in the flow of flight hardware where a P/FR is not required nor is it the appropriate reporting mechanism, and other procedures (e.g., Inspection Reports, Material Review Boards, etc.) may be employed. Under these conditions, the Quality Assurance Alert should be filled out by the cognizant personnel and submitted to the Alert System Engineer

3.2.3 JPL Alert/Concern Submittal For Electronic Parts Problems

Electronic Parts Engineering Office prepares detailed reports on the evaluation and test of electronic parts which meet the criteria for a JPL Alert/Concern. Under these conditions, the form AC-100X, shown in Appendix A, should be filled out by the cognizant personnel and submitted to the Alert System Engineer.

3.2.4 JPL Alert/Concern Form

It is recognized that there will be instances when a potential Alert/Concern is identified and will not be covered by normal reporting systems (e.g., P/FR, IR, etc.). In those cases, a specific form has been developed for use by the JPL technical staff. Under these conditions, the form AC-100X, shown in Appendix A, should be filled out by the cognizant personnel and submitted to the Alert System Engineer. Alternately, information about the problem can be submitted via Internet at http://nppp.jpl.nasa.gov/dmg.jpl/loc/507/clas/cla-syst.htm.

3.3   Logging and Distribution of Alerts/Concerns

Alerts and Safe-Alerts are processed somewhat differently since Alerts are more likely to affect project flight hardware, whereas Safe-Alerts tend to impact institutional organizations and operations. This is not to preclude the occasional problem that affects both, in which case it is submitted to both projects and the Safety Operations Section for resolution.

Alert/Concerns are received both electronically from GIDEP and in hardcopy form from internal sources and from other NASA facilities. Currently for the GIDEP documents, a hardcopy of the text is create to facilitate specialist review, but they can provide their comments and recommendations electronically at the Closed Loop Alert System home page.

a. Alert Logging. All Alert/Concerns from internal and external sources are screened, logged and distributed, as appropriate (see appendix D, figure D-1 for process slip). The Alert System Engineer reviews each submittal to the criteria of paragraph 3.1. For those Alert/Concerns meeting the criteria, the Alert System Engineer:

1) Assigns JPL Alert Number (see Appendix G-1 for guidelines) and writes it at top of Alert or downloaded text hardcopy.

2) If the Alert/Concern does not have a GIDEP Number, the ASE creates a Source Number (see Appendix G-2) and writes it in parentheses under the JPL Alert Number on the hard copy.

> NOTE: Sometimes the problem report is written by one facility, but sent under a cover sheet or letter from someone else. The cover sheet should be removed and the Source Number assigned according to the originator of the problem report.

3) Enters Specialist's name, Alert number, Source number, and dated received into Alert Log Book.

4) Makes a copy of the Alert for the Specialist.

5) If not electronically downloaded into the database, enters pertinent data for Alert/Concern System (ACS).

6) Fills out the top of the Specialist Recommendation form (Blocks 1-7).

7) Prepares Alert packet and submits it to the Specialist. The Alert packet contains:

   a) The partially filled Specialist Recommendation form (JPL 0979)

   b) A copy of the Alert

8) Files the hardcopy in the hold folder month-year downloaded.

9) Distributes an informational copy of all Alerts and Safe-Alerts Concerns to Quality Assurance (QA), Office 512.

10) Distribute an informational copy of all Alerts and Problem Advisories pertaining to fasteners to the JPL on-site Inspector General's Office (IGO).

b. <u>Safe-Alert Logging</u>. Safe-Alerts received by the ASE, who:

   1) Assigns JPL Alert Number (see Appendix G-1 for guidelines) and marks at top of Safe-Alert or downloaded hard copy.

   2) Contacts Safety Operations Section to determine appropriate review. If the problem is general, in that it is distributed to Division Safety Representatives, then it is assigned to a central safety official who will close based on their responses. Otherwise, it is assigned to a specific safety specialist. In either case the name of the person responsible for closure is noted at top of Safe-Alert.

   3) If the Alert/Concern does not have a GIDEP Number, the ASE creates a Source Number (see Appendix G-2) and writes it in parentheses under the JPL Alert Number on the hard copy.

   4) Makes a copy of the Safe-Alert and submits to the Safety Operations Section.

   5) If not electronically downloaded into the database, enters pertinent data for Alert/Concern System (ACS).

   6) Files the hardcopy in the hold folder month-year downloaded.

   7) Forwards an informational copy of the Safe-Alert to all interested JPL personnel/organizations, particularly, project flight safety officers, when appropriate.

3.4 Specialist Review of Alert/Concern

Alert/Concerns are submitted to parts, materials and process Specialists to obtain their comments and recommendations on the Alert/Concerns. Depending on recommendation of the Specialist, the Alert/Concern may not be distributed to the project and task managers for review when, in the Specialist's opinion, there is no operational risk in the problem to JPL and therefore "No Concern" to JPL hardware and operations. Additional guidelines are contained in Appendix E-2.

a. Upon receipt of a copy of an Alert/Concern from the ASE, the Specialist shall review the Alert/Concern to determine applicability to parts and/or material probably in use by JPL[1] and the problem would present an operational risk[2]. Recommendations, tentative conclusions, and any other information shall be documented either on Form 0979 and transmitted to the ASE. Alternately, the Specialist may directly entered into the EPINS database via the Office local area network (see Appendix C-2) or via the reply form on the CLAS home page on Internet, but will need a password for this access in either case. The ACS data bank can be queried for previous problems associated with the Alert/Concern, say by generic part number or part manufacturer.

b. Provide recommendations for the following problem types.

    1) Parts/Materials
- What changes needed to selection lists/preferred parts/materials lists
- What actions for parts/materials on design lists or out for procurement
- What actions for parts/materials in stores
- What actions for parts/materials built into flight hardware or critical ground support equipment
- Special handling and storage to assure that the part/material does not degrade from improper handling.

    2) Processes
- Modification of JPL processing specifications.
- Avoidance of the suspect process in the future applications.

    3) Packaging
- Special handling instruction to prevent electrostatic discharge from damaging electronic components.
- Modify or write a specification for cleaning components.
- Write rework instructions to avoid damage to unit during repairs or modification.
- Recommend facilities and tools for retest or rework.

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[1] Note: It is assumed that new projects would review their lists against all Alert/Concerns as part of the normal part/materials list reviews and nonstandard product approval processes. Therefore, Specialists need only to review Alert/Concerns as applicable to current and past projects or current safety practices.

[2] Operational risk: The occurrence of the problem in flight hardware could result in mission loss or degradation; or in institutional operations, it could be a safety hazard.

3.5 Specialist Response to Alert/Concern

Although the review by Specialists can entail some contact with the Alert/Concern originator, users at JPL, and the manufacturer, the ASE will promote the return of their response within thirty days to assure timely notification of projects. (See appendix D, figure D-2 for the Specialist Reply Process slip.)

a. Upon receipt of the Specialist recommendation, the ASE will:

1) Check that the Specialist entered the generic part number and single-letter designator code in block 11.

2) Check that the Specialist identified the item as a "Concern" or "No Concern."

3) Sign and date block 13.

4) Log the return in the Alert Log binder and in EPINS.

5) File "No Concern" Alerts and Specialist recommendations (no further action required for "No Concern" problems) and "Close" Alert in EPINS.

b. For "Concern" items, the ASE will:

1) Prepare Feedback Log sheet for Alert/Concern and the "out" date that the MAM/Rep packets are sent.

2) Prepare e-mail packets consisting of:

a) Modify e-mail questionnaire (boilerplate messages) including Specialist recommendations.

b) Attach copy of Alert text file.

c) E-mail to appropriate distribution lists.

d) Print copies of e-mail for project response folder.

3) Prepare project response folder for Alert/Concern and e-mail notices.

4) Log distribution into EPINS.

c. On items recommended for distribution to NASA/GIDEP (see appendix D, figure D-8, GIDEP Process slip), the ASE:

1) Verifies that the problem meets the GIDEP submittal criteria (see GIDEP publication S0300-BT-PRO-010) and the NASA submittal criteria (see NPG 8735.TBD).

2) Notifies the Laboratory organization that is responsible for the part, material, or process.

3) Prepares, or assists in preparing the Alert, Safe-Alert or Problem Advisory.

4) Coordinates with the manufacturer of the problem items. Requests a response within the specified period. When a manufacturer replies, the ASE determines, with the concurrence of the JPL Specialist or cognizant organization whether to modify the Alert, cancel it, release with a copy of the correspondence, or prepare a supplementary Alert to transmit any information.

5) Obtains necessary concurrences.

6) Distributes to GIDEP, other NASA facilities and the manufacturer.

d. For JPL-originated Alert/Concerns, the ASE sends a copy of the completed Alert Submittal form back to the JPL submitter.

3.6 Safety Operations Review

The Safety Operations Section is responsible for continuously monitoring safety problems at JPL, as well as reviewing and taking action on the periodic submittals of Safe-Alerts by the Alert System Engineer.

3.6.1 External Safe-Alerts

The Safety Operations Section shall review all Safe-Alerts submitted by the ASE for potential safety problems or hazards at JPL. The Safety Operations Section shall determine necessary actions, including notifying appropriate JPL elements. The Safety Office will submit a monthly report to the ASE listing actions and whether the Safe-Alert is closed.

3.6.2 Internal Safety Issues

The Safety Operations Section shall review reports of hazardous conditions, unsafe practices, or faulty equipment to determine whether a Safe-Alert should be issued. When a candidate for a Safe-Alert is identified, the Safety Operations Section shall:

a) Complete Alert form DD1938 (The GIDEP Operations Center will add the prefix "SAFE-ALERT" to the heading). If a part/material/process is involved, consult with the JPL organization responsible for the part/material/process. The ASE will be available for consultation and assistance.

b) Submit the completed Safe-Alert to the ASE for concurrent GIDEP Operations Center and manufacturer notification (if a part or material from a specific manufacturer is involved) and for required processing as provided in paragraph 3.5.c.

3.7   Safety Operations Response

The Safety Operations Section is responsible for the timely review and resolution of safety issues affecting JPL and the ASE will track closure of them by the monthly Safety Operations report.

3.7.1 External Safe-Alerts

Upon receipt of the monthly Safety Operations report, the ASE:

a. Logs Safe-Alerts closed out by the Safety Operations in EPINS and Alert Log binder.

b. Enters Safety Operations actions into the ACS.

d. Files the Safety Operations report in the locked file cabinet.

3.7.2 Internal Safety Issues

a. On items recommended for distribution to NASA/GIDEP, the ASE:

1) Verifies that the problem meets the GIDEP submittal criteria (see GIDEP publication S0300-BT-PRO-010) and the NASA submittal criteria (see NPG 8735.TBD).

2) Prepares, or assists in preparing the Safe-Alert.

3) Coordinates with the manufacturer of the problem items and request a response within the specified period, unless the urgency of the problem warrants simultaneously notification (see GIDEP procedures). When a manufacturer replies, the ASE determines, with the concurrence of the Safety Operations Section whether to modify the Alert, cancel it, release a copy of the correspondence, or prepare a supplementary Alert to transmit any information.

4) Obtains necessary concurrences.

5) Distributes to GIDEP, other NASA facilities and the manufacturer.

b. For JPL-originated Safe-Alert/Concerns, the ASE sends a copy of the completed Alert Submittal form back to the JPL submitter.

3.8   Project Review of Alert/Concern

The project or task manager has the responsibility to review Alert/Concerns against their hardware, but the review is commonly delegated to the Mission Assurance Manager. The MAM, in turn, many times relies on support personnel in various groups to determine the impact of a given Alert/Concern on the hardware. Upon assessing the overall impact on the hardware, the MAM will propose an action plan, if needed, and report on the completion of the plan to the ASE. (Additional guidelines are contained in Appendix E-3.)

a. Upon receipt of a copy of an Alert/Concern from the ASE, the MAM/PM/CSM shall review the Alert/Concern to determine if the subject part or material is used by the project or task. Responses to the Alert/Concern shall be provided to the ASE. The MAM shall notify the ASE of the reason for the "no concern," when the part/material is not used, it is no risk because of type of usage, or for other factors.

b. If action is required, the appropriate Manager shall take action as required. Such a plan may include;

   1) Notification of responsible engineers.

   2) Consultation with the appropriate Specialists, such as, Reliability Engineer, Flight Safety Engineer, etc.

   3) Notification of the appropriate Material/Part Representative and Quality Assurance Representative of the actions required.

c. A copy of an action plan and a monthly report on the status of the plan shall be provided to the ASE by the MAM. Monthly reports shall be provided until all required actions have been completed.

3.8.1 Part/Materials/Process Specialist.

The Specialist shall be available for consultation in the formation of the user's action plan. The Specialist should consult with the user and review the parts/materials/process application prior to performing risk assessments. The Alert System Engineer maintains a list of JPL specialists and can suggest points of contact.

3.8.2 Material/Part Representatives (MPR).

a. Upon receipt of a copy of an Alert/Concern from the ASE, the MPR shall review the Alert/Concern to determine if the subject parts or material is in their control (e.g., being procured, in test, in stock, in kits, or in flight hardware). The MPR shall consult with the user and review the parts application prior to performing risk assessments or part disposition.

b. When action is required, the MPR shall assist the user (MAM, PM, CSM) in the preparation of the users action plan. Examples of possible actions are:

- Purge items from stock
- Stop procurement of items
- Remove kitted items from distribution
- Special testing required
- Special requirements for risk assessment
- Design change

c. If required, upon the request of the ASE and with the concurrence of the user, the MPR can embargo the parts or material under their control. The MPR shall provide monthly status reports, as appropriate, to the ASE on the status of affected parts or material under MPR control.

3.8.3 JPL Quality Assurance Representative (QAR).

a. Upon receipt of a copy of an Alert/Concern from the ASE, the QAR shall review the Alert/Concern to determine if the subject parts or material is in QAR control (e.g., in test, in stock, in kits, in flight hardware).

b. If required, and upon the request of the MPR and with the concurrence of the user via the user's action plan, the QAR shall reject parts/material so identified and verify their prescribed disposition as appropriate (i.e., purge from stock, withhold kits in process to user, special test required, etc.). The QAR shall provide monthly status reports, as appropriate, to the MPR on the status of affected parts under QAR control.

3.9   Project Response to Alert/Concern

a. Upon receipt the ASE reviews the response for completeness.

b. The ASE logs the return in the Alert Log binder and in EPINS.

c. ASE files a hardcopy of the response in the Alert/Concern folder.

d. The ASE prepares monthly reports to remind MAMs on delinquent responses.

e. When all actions required of all projects have been completed, the item shall be closed and no longer reported.

f. The resolutions of the concerns shall be stored in the dedicated data bank and included in the periodic status report.

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4.0 REPORTS

The following reports shall be prepared to support the Alert/Concern System. Detailed procedures for preparing the reports are explained in appendix F.

4.1 Reports to Management

To keep management abreast of the Alert/Concern activities:

a. The Alert System Engineer develops and distributes a monthly Alert/Concerns System Report consisting of a Alert/Concern Summary Report and Specialists recommendations.

b. The ASE prepares periodic reports from the EPINS data base to identify trends in Alert/Concern System activities, such as:

- Counts of delinquent responses by Specialists and projects.

- Utilization report, year to date.

4.2 Reports to Specialists

To assure rapid dissemination of pertinent Alert/Concerns within JPL, the ASC prepares monthly reports to remind Specialists and Safety Operations of delinquent responses.

4.3 Reports to Projects

To assure that projects are reviewing Alert/Concerns in a timely manner, the Alert System Engineer prepares monthly reports to help MAMs close Alerts. They include a reminder report of Alerts not closed and a Detailed Parts Report on Alerts received during the previous month.

4.4 Annual GIDEP Report

A GIDEP Annual Utilization Report is required each year to maintain GIDEP membership. The JPL report supports the GIDEP Program Manager's report to the DoD in justifying a GIDEP program budget. The GIDEP Annual Report is to be prepared in accordance with the instructions received from GIDEP Operations Center.

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APPENDIX A:
ALERT/CONCERN FORMS

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Form AC-100X
Alert/Concern Submittal

This form can be used by anyone at JPL to submit a non-P/FR originated JPL Alert/Concerns into the system. Instruction for its preparation are written on the back of the form.

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ALERT SUBMITTAL FORM

Submitter:	Phone:	Date:
Project/Task:	First Occurrence Date:	
Reference Report No:		
Submittal Criteria No: (see back of form)		

Problem Description:

Problem Significance:

ALERT SYSTEM ACTIONS		
Specialist Review: Concern ☐ No Concern ☐		
Distributed within JPL Yes ☐ No ☐ JPL Alert No:		
Distributed to GIDEP Yes ☐ No ☐ GIDEP Alert No:		
Alert System Engineer (sign/date):		
cc: Submitter		

ALERT SUBMITTAL CRITERIA

Alerts should be submitted for consideration by anyone who experienced, found, and/or investigated a technical problem which resulted in failure or out-of-spec performance and can reasonably be expected to be repeated on other tasks or projects.

Criteria No.   What problems to submit:

1   Problem occurs even though the use of the product or process is within the limits of the controlling document or guideline   .
2   Problem occurs when the application is out of specification limits but engineering judgment predicted acceptable performance.
3   Hardware problem is caused by the use of processes, procedures, and/or materials.

          What not to submit:

•   Problem which is caused by personnel, delivery, contractual or financial matter.
•   Problem is due to blatant violations of manufacturer's guidelines or specification limits.
•   Problem caused by obvious mishandling or operator error.
•   Problem is caused by a single application of a unique one-of-a-kind mechanical design.
•   Problem is caused by a unique application of a generic process, material or part.

_____

ALERT SYSTEM ENGINEER
M.S. 303-200

Form JPL 0979
Alert Recommendations

This form is given to Specialists to obtain their recommendations regarding an Alert/Concern before it is submitted to the projects.

jpl->   **ALERT RECOMMENDATIONS**

1. ALERT NUMBER

2. PART DESCRIPTION	3. GIDEP INDEX NUMBER

4. MANUFACTURER AND PART NUMBER	5. DATE ALERT RECEIVED

6. RESPONSIBLE JPL SPECIALIST, SECTION, MAIL STATION, EXTENSION	7. DATE OF RECOMMENDATION

8. SIMILAR PARTS WHICH MIGHT BE AFFECTED BY PROBLEM DESCRIBED IN ALERT

9. JPL PROGRAMS KNOWN TO BE USING AFFECTED PARTS

10. PREVIOUS HISTORY

11. RECOMMENDED JPL ACTION

12. SIGNATURE OF SPECIALIST	13. SIGNATURE OF GIDEP REPRESENTATIVE

Form DD1938
Alert Form

This form is used by NASA and DoD to capture Alert/Concern information for submittal and distribution by the Government Industry Data Exchange Program (GIDEP). When JPL Alert/Concerns meet the NASA or GIDEP criteria. the Alert System Engineer uses the form to distribute the problem information.

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GOVERNMENT-INDUSTRY DATA EXCHANGE PROGRAM

ALERT

Please Type All Information - See Instructions On Reverse

Public reporting burden for this collection of information is estimated to average 6 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.　　Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.　　Please DO NOT RETURN your form to either of these addresses.

1. NOMENCLATURE (Parts/Materials/Hazard/Safety Problems)	2. ALERT/SAFE-ALERT NO.
	3. DATE (Year, Month, Day)

4. MANUFACTURER AND ADDRESS	5. NSN
	6. PROCUREMENT SPECIFICATION / 7. REFERENCE
	8. MANUFACTURER'S PART NUMBER / 9. LOT/DATE CODE OR SERIAL NO.

10. SPECIAL REQUIREMENTS OR ENVIRONMENT (Requirements placed on, or extreme environment to which item was exposed)

11. PROBLEM SITUATION AND CAUSE (State facts of problem and cause-failure mode and mechanism-project and function)

12. ACTION TAKEN (State all actions taken to correct the problem situation and to prevent its recurrence)

13. DATE MFR NOTIFIED (Year, Month, Day)	14. MANUFACTURER RESPONSE	15. CONTACT POINTS FOR INFORMATION (Name, Affiliation, Phone)
	☐ CORRESPONDENCE ATTACHED ☐ DID NOT REPLY	

16. ALERT COORDINATOR (Name, Affiliation)	17. SIGNATURE OF ALERT COORDINATOR

DD Form 1938, FEB 90　　　　　　*Previous editions are obsolete.*　　　　　542/094

A-11

INSTRUCTIONS FOR PREPARING DD FORM 1938,
"GOVERNMENT - INDUSTRY DATA EXCHANGE PROGRAM ALERT"

1. **NOMENCLATURE** - Enter major subject category classification and function information obtained from the Government-Industry Data Exchange Program (GIDEP) Subject Thesaurus.

2. **ALERT/SAFE-ALERT NO.** - Use originator's code assigned by GIDEP. Enter letter "A" for ALERTS or letter "S" indicating SAFE-ALERT when subject of ALERT affects health or safety of personnel who may come in contact with defective part or unit it is assembled into. The letter is followed by last two digits of year and then by consecutive sequence number of all ALERTs submitted by the originator for that year. An addendum is indicated by adding a change letter (A, B, or C, as required) to the sequence number. For example: XX-A-77-02A is the ALERT number for addendum to second ALERT in 1977 by an originator with code XX.

3. **DATE** - This is date Alert is released by Alert Coordinator. Note coordination procedures in 13. Each addendum should have new release date.

4. **MANUFACTURER AND ADDRESS** - List actual manufacturer of item. Also enter manufacturer's Federal Code Number from Federal Handbook H4-1 or H4-2. When possible, also enter Contract Administration Service Code Number (CASN) from DOD 4105.59-H. If supplied from source other than manufacturer and this is pertinent, also list the source here or in Block 10. If ALERT is against a category or application, do not identify manufacturer.

5. **NATIONAL STOCK NUMBER** - (Formerly Federal Stock Number.) List applicable number. If several numbers are applicable and space is not available, place asterisk after the last number and continue entry in Block 10. As a minimum, enter Federal Supply Class.

6. **PROCUREMENT SPECIFICATION** - List applicable procurement specification and name of issuing organization. Include, in Block 10, nearest government or industry specification and any exceptions or special recognized government or industry specification requirements imposed.

7. **REFERENCE** - List any applicable documentation not included as part of this ALERT, e.g., previous ALERT number, TWX, or report number.

8. **MANUFACTURER'S PART NUMBER** - List manufacturer's catalog identification/part number of item. If different than procurement specification identification, list nearest similar manufacturer's identification and list the differences in Block 11.

9. **LOT/DATE OR SERIAL NO.** - When problem is applicable to only certain lot/date code or serial numbered items, list appropriate code or number. Use year purchased if other information is not available. Blank space indicates "all."

10. **SPECIAL REQUIREMENTS OR ENVIRONMENT** - State any special requirements placed on item or any special or extreme environment to which it was subjected. This would include any exceptions or requirements other than imposed in applicable procurement specification listed in Block 6.

11. **PROBLEM SITUATION AND CAUSE** - State facts of problem and cause, including failure mode and mechanism.

12. **ACTIONS TAKEN** - State all actions taken to correct problem situation and to prevent further occurrences. This will include any actions taken by manufacturer, if known.

13. **DATE MANUFACTURER NOTIFIED** - Release of ALERT requires that a copy be sent to manufacturer identified in Block 4 and fifteen (15) working days be allowed for a reply. When available, attach a copy of the reply to the ALERT.

14. **MANUFACTURER RESPONSE** - Item manufacturer must be notified. When manufacturer correspondence is included, check CORRESPONDENCE ATTACHED entry. When manufacturer does not reply, check DID NOT REPLY entry. If ALERT is against a category or application and manufacturer is not identified, enter N/A in CORRESPONDENCE ATTACHED entry.

15. **CONTACT POINTS FOR INFORMATION** - Enter name, affiliation, and telephone number of persons to contact for further information. This may include designated personnel from ALERT originator's organization, or any other organization.

16. **ALERT COORDINATOR** - Enter name and affiliation of the ALERT Coordinator.

17. **SIGNATURE** - Signature of ALERT Coordinator.

18. **NOMENCLATURE** - Same as Block 1.

19. **ALERT/SAFE-ALERT NO.** - Same as in Block 2.

DD Form 1938, Reverse, JUN 86

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APPENDIX B: ACRONYMS

AAN	Agency Action Notice
ASE	Alert System Engineer
ACS	Alert/Concern System
CLAS	Closed Loop Alert System
CSM	Cognizant Section Manager
DLA	Defense Logistic Agency
DMS	Diminishing Manufacturing Sources
EPIMS	Electronic Parts Information Management System (NASA)
EPINS	Electronic Parts Information Network System (JPL)
FEDI	Failure Experience Data Interchange (GIDEP)
GIDEP	Government Industry Data Exchange Program
IGO	Inspector General's Office
JPL	Jet Propulsion Laboratory
MAM	Mission Assurance Manager
MPR	Material/Part Representative
NASA	National Aeronautics and Space Administration
NHB	NASA Handbook
NMI	NASA Management Instruction
PA	Problem Advisory
PCN	Product Change Notice
PFAR	Parts Failure Analysis Report
P/FR	Problem/Failure Report
PIP	Parts Information Program
PM	Project Manager
PS	Packaging Specialist
QA	Quality Assurance
QAR	Quality Assurance Representative
SO	Safety Operations
UDR	Urgent Data Request

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APPENDIX C:
ALERT/CONCERN SYSTEM PROCESSES

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Appendix C-1   Alert/Concern System Flow

GIDEP

Problem Advisory
Alert
Safe-Alert
Agency Action Notice

NASA

TWX Alert
Pre-Alert
NASA Advisory

JPL

PIP
IOM
PFR Review
PFAR
QA Alert
DPA
Constr. Analysis

ALERT CONCERN SYSTEM
Receiving Logging Classifying
ASE

Review & Resolve Safety Issue

Review & Recommend on Parts, Matls or Process Issue
SPECIALIST

Safety Office Closure
SO SPECIALIST

Send to GIDEP?
ASE

Concern?
ASE

Yes ⟶

No

Yes

Close and File SO Response
SO

Close out Alert/ Concern
ASE

Closure Required?
ASE

No

Yes

Draft Alert, Safe-Alert or Advisory
ASE

"Info Only" Distribution
ASE

Project Review
MAM

Coordinate with JPL Specialist
ASE

Distribute to NASA

Applicable?
MAM

No

Yes

Coordinate with Vendor
ASE

Prepare and Execute Plan
PROJECT

Obtain Alert Coordinator Signature
ASE

Prepare Formal Reply
MAM

Distribute to vendor, NASA and GIDEP
ASE

Close and File Project Response
ASE

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Specialist Alert Review

There are three methods for specialists who are performing electronic review of incoming Alert/Concerns to make recommendations regarding the reported problem. The traditional method is to fill in the form JPL 0979A and return it by mail to the Alert System Engineer. Alternately, the Specialist can response electronically using either the EPINS LAN or the Internet Closed Loop Alert System reply form.

1. **EPINS Local Area Network Users**. A password is necessary to access the EPINS and authorization from the EPINS Network Manager is needed to edit the Alert/Concern records.

    a. Access Procedure

        1) Log into EPINS.

        2) Select **Network Applications Menu** and press **[Enter]**.

        3) Select **4** Alert/Concerns System.

        4) Select **1** Data Entry Menu.

        5) Select **3** Enter/Maintain Specialist Response.

    b. Review Procedure

        1) Press **Caps Lock** key.

        2) Press **S** to review the Alert Summary.

        3) Press **[Enter]** to enter known project affected. Press **[End]** key to open the memo field. Type in at least **UNKNOWN** into the field.

        4) Press **[Tab]** to go to the History field. Press **[End]** key to open the memo field. Type in at least **UNKNOWN** into the field.

        5) Press **[Tab]** to go to the Recommendation field. Press **[End]** key to open the field.

        6) Press **[Tab]** to go to the Concern field. Type in **T** if the problem is a concern for JPL; type **F** if not.

        7) The Completed field will automatically fill in when you declare the Alert a concern or no concern. The record will be locked from further editing.

        8) Press **[Home]** to save your review.

        9) Repeat steps 1 and 8 for each document.

    c. Exit Procedure

        1) Press **[Esc]/[End]** as needed to exit.

2. **Internet Users**. An automated, interactive access to the JPL Alert/Concern System is available through the Internet (at URL address *http://nppp.jpl.nasa.gov/dmg/jpl/loc/507/clas/cla-syst.htm*). It provides direct access for Mission Assurance Managers, safety representatives, parts and materials specialists to the closed-loop reporting of Alerts, Safe-Alerts, and Problem Advisories originating within JPL or from NASA and the Government Industry Data Exchange Program (GIDEP). It reduces the response time for placing new reports on-line, for reviews by parts, materials, and safety specialists and for reviews and closures by projects.

A password is necessary to access the Closed Loop Alert System reply form. Contact the Alert System Engineer should you be denied access.

a. Access Procedure

     1) Activate you Internet browser.

     2) Select URL *http://nppp.jpl.nasa.gov/dmg/jpl/loc/507/clas/cla-syst.htm*

     3) Select button for "Project/Expert Reply."

     4) Select button for "Alert Response Form."

     5) Enter your User ID and Password and verify Type of Response.

     6) Click the down button at the right edge of the window and select the Alert you want to review.

b. Review Procedure

     1) To review the text file, click on the <u>Source#</u>.

     2) Type in your comments and recommendations in the "Comments/Notes" window.

     3) Indicate whether you feel that this problem is likely to impact current projects (including contracts) by changing "Is This a Concern?" to "Yes" or "No."

     4) If you have completed your response, charge the "Response Complete?" to "Yes."

     5) Press the "Submit" button to complete your response.

     6) Repeat steps 1 and 5 for each Alert.

c. Exit Procedure

     1) Close your browser or select another URL to exit.

APPENDIX D:
PROCESS SLIPS

Figure D-1 New Alert/Concern Process Slip

NEW ALERT/CONCERN PROCESS

	Obtain hardcopy/attach slip
	Logged in to Incoming Alert Log binder
	Transfer to EPINS
	Assign to Specialists in EPINS
	AC # and Specialist noted on Hardcopy
	Non-GIDEP Concern -> Non-GIDEP slip
	Hardcopy copied for Specialist
	Recommendation filled out
	Mailed to Specialist
	E-mail to Div. Safety Rep.s
	Hardcopy+suspense filed in month folder

5/13/96 C:\ALERTSYS\FORMS\SLIPS.DOC

Figure D-2 Specialist Reply Process Slip

SPECIALIST REPLY PROCESS

	Note return in Incoming Alert Log binder
	Retrieve hardcopy from in month folder.
	Enter reply in to EPINS +DES+generic
	If "No Concern":
	File Recom. form with hardcopy in hall
	If "Concern":
	Scan Specialist Recommendation
	Initiate Log sheet in Project binder
	Edit cover page for e-mail
	E-mail cover/alert/recom. to closure/info
	Create AC- folder for replies
	Insert copy of A/C & e-mail msg
	Log distr. (person/date) in EPINS

7/1/96 C:\ALERTSYS\FORMS\SLIPS.DOC

Figure D-3 Project Reply Process Slip

PROJECT REPLY PROCESS

	Print reply (if e-mailed)
	Logged in to Project Log binder
	Logged in to EPINS
	If it is the last project, close the header card.
	File reply in Alert/Concern folder

7/2/96 C:\ALERTSYS\FORMS\SLIPS.DOC

Figure D-4 Non-GIDEP Scan-In Process Slip

NON-GIDEP SCAN-IN PROCESS

	JPL # and Specialist Name at top of document.
	Log into Incoming binder/File Log. Assigned Text File = _J1_____ .
	Load Scanner and scan for both text and image. Save as H:\alert\scan-in_____
	Load Word scanned file. Save in TXT format as R:\dmg\jpl\loc\alr\jpl_____.
	Load PhotoShopPro. Open Image files and save as: R:\dmg\jpl\loc\alr\jpl_____ thru _____ in GIF format.
	Go into EPINS/Alert System/Data Entry/ EnterMaintain Alert. Enter Summary inform.
	Link image files in EPINS/Alert System/Data Entry/EnterMaintain Alert Image Files

5/13/96 C:\ALERTSYS\FORMS\SLIPS.DOC

Figure D-5 Project Distribution Update Process Slip

PROJECT DISTRIBUTION UPDATE

	Revise Log form (H:\Alert\Distrbtn\Dist-log.doc)
	Revise Personnel in EPINS under Alert System/Data Entry/Personnel
	Update Distribution File (H:\Alert\Distrbtn\FB-Q-DIS.doc)
	Revise ccMail Private Mailing Lists
	Closed Loop Alert List.
	Closed Loop - Electronics
	Alert Info (only)
	Div. Safety Reps.
	Flight Safety Alerts
	Revise Cover Memos H:\Alert\Distribtn
	Non-Elect.Closure CLA102NE.TXT
	Elect. Closure CLA102-E.TXT
	Info Only CLA102IO.TXT
	Revise Distr. List A071
	Reassign/close previous assignments in EPINS

5/13/96 C:\ALERTSYS\FORMS\SLIPS.DOC

Figure D-6 Specialist Distribution Update Process Slip

SPECIALIST DISTRIBUTION UPDATE

	Revise Personnel in EPINS under Alert System/Data Entry/Personnel
	Revise ccMail Private Mailing Lists
	Alert Info (only)
	Flight Safety Alerts
	Revise Cover Memos H:\Alert\Distribtn
	Non-Elect.Closure CLA102NE.TXT
	Elect. Closure CLA102-E.TXT
	Info Only CLA102IO.TXT
	Flt. Safety CLA102FS.TXT

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Figure D-7 Non-GIDEP Concern Process Slip

Non-GIDEP Concern Process Slip

	Assign EPINS file name_____ (e.g., *jabcde*)
	Scan-in document [*Use Non-GIDEP Scan-In slip*]
	Log file names in EPINS at Alert/Data Entry/(8).
	If Appropriate for distribution to GIDEP, attach GIDEP process slip.

5/13/96 C:\ALERTSYS\FORMS\SLIPS.DOC

Figure D-8 GIDEP Process Slip

GIDEP Process Slip

	Select GIDEP document type
	  ð Alert
	  ð Safe-Alert
	  ð Problem Advisory
	  ð Urgent Data Request

	Draft GIDEP report using appropriate MSWord form in C:\Alertsys\Forms:
	   Alert = al.doc
	   Safe-Alert = al.doc (Add "SAFE-" to title)
	   Problem Advisory = pa.doc
	   Urgent Data Request = udr.doc

	Submit draft to originator/requester and specialist for comment.

	For Alert/Safe-Alert/Problem Advisory:
	   Submit draft to Office Manager for initial review
	   Submit draft to vendor for comment.
	   Submit Pre-Alert to other NASA Alert Coordinators.

	Upon receipt of vendor comments or passage of 3 weeks:
	   Append vendor comment to document.
	   Log in EPINS (i.e., process as New Alert/Concern).

	Submit to GIDEP.
	Submit to NASA Alert Coordinators.
	Submit to vendor.

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Figure D-9 UDR Process Slip

UDR Process Slip

	Determine whether to submit to specialist.
	Log in Incoming Alert Log. (Ignore FILE NAME# and JPL ALERT# columns.)
	Note to specialist to return a copy of the UDR if they were able to respond

5/13/96 C:\ALERTSYS\FORMS\SLIPS.DOC

Figure D-10 Alert/Concern Reassignment Slip

Alert/Concern Reassignment Slip

	Obtain hardcopy of Alert/Concern.
	Fillout/Markup Alert Recommendation Form
	Edit Log binder
	Log closed in EPINS for old assignee
	Log open in EPINS for new assignee
	Send packet to new assignee
	File/Markup Recommendation Form "hold" copy in month folder

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APPENDIX E:
TRAINING MATERIAL

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January 31, 1997

Core Training Module

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Technical Problem Tracking and Avoidance

Lessons Learned
Problem/Failure Reporting
Alert/Concerns

R. Karpen

January 31, 1997

INTRODUCTION

There are three reporting system at JPL that support the tracking and/or avoidance of technical problems.

LESSONS LEARNED (LL)

PROBLEM/FAILURE REPORTING SYSTEM (P/FR)

ALERT/CONCERN SYSTEM (ACS)

PURPOSES

Lessons Learned is a high level, Institutional, lessons-learned repository

ACS is an intermediate level sharing of problems between Projects and between JPL and outside

P/FR System is the problem tracking and resolution at the Project working level

CHARACTERISTICS

Lessons Learned
   Summaries of events that had significant impact on project performance, cost, schedule, or safety

Problem/Failure Reporting System
   Closed loop tracking of problems occuring with project flight hardware and software

Alert/Concern System
   Closed loop tracking and information dissemination of problems occuring on JPL projects or outside of JPL

RELATIONSHIPS

- Problems discovered in a JPL Project are tracked by the P/FR System to closure

- P/FRs that could impact other JPL Projects are sent to the Lessons Learned and ACS

- Alert/Concerns are distributed to other JPL Projects for possible action

- JPL Alerts are sent to NASA and GIDEP for information

- Lessons Learned items are used to develop new project requirements to avert past problems

INTERACTIONS
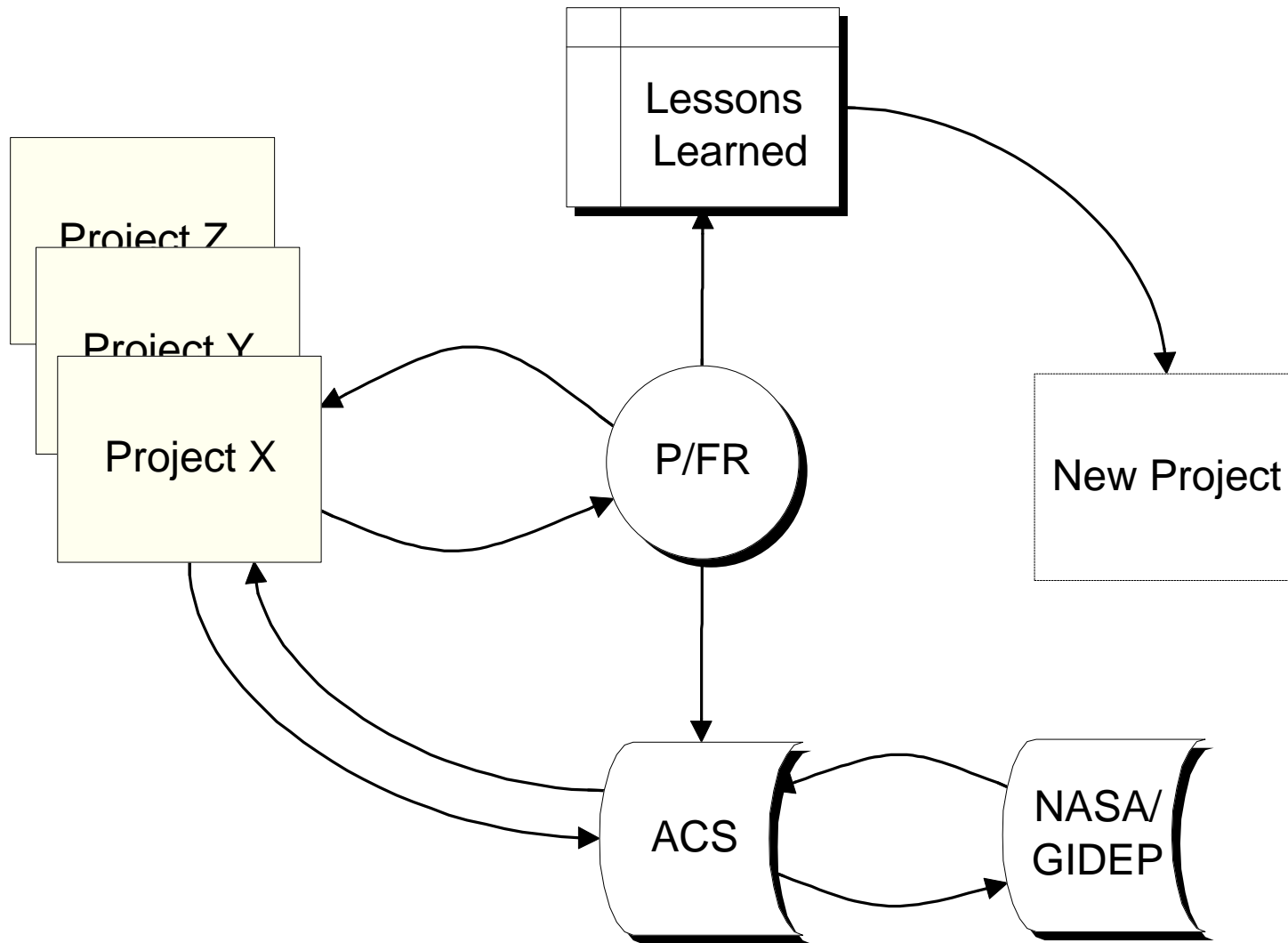
HOW CAN YOU USE THEM?

Technical Group Supervisors
(Technical Group Supervisor Class)

Review Lessons Learned for problems in your area

Support the technical review and closure of P/FRs

Support the review of Alerts by Specialists in your organization

Review ACS for Alerts on specific parts, materials or processes in your area

HOW CAN YOU USE THEM?

COGNIZANT ENGINEERS
(Project Management, H/W Engineering & EEE Parts Classes)

Use the Lessons Learned to develop program requirements

Use P/FR System to assure adequate attention and closeout of technical problems and failures

Use ACS in the selection of parts, materials, processes.

Support the closure of Alerts for your project.

Consult with the Alert Specialists

HOW CAN YOU USE THEM?

DESIGN ENGINEERS
(H/W Engineering & EEE Parts Classes)

Use the Lessons Learned to eliminate poor design practices.

Use the PF/R System to avert design and parts that have a poor history

Use the ACS to guide the selection of parts, materials and processes.

HOW CAN YOU USE THEM?

MISSION ASSURANCE MANAGERS

(H/W Engineering Class, Project Management Class)

Use the Lessons Learned to develop program requirements

Use P/FR and Alert/Concern Systems to assure adequate and timely closeout of technical problems and failures
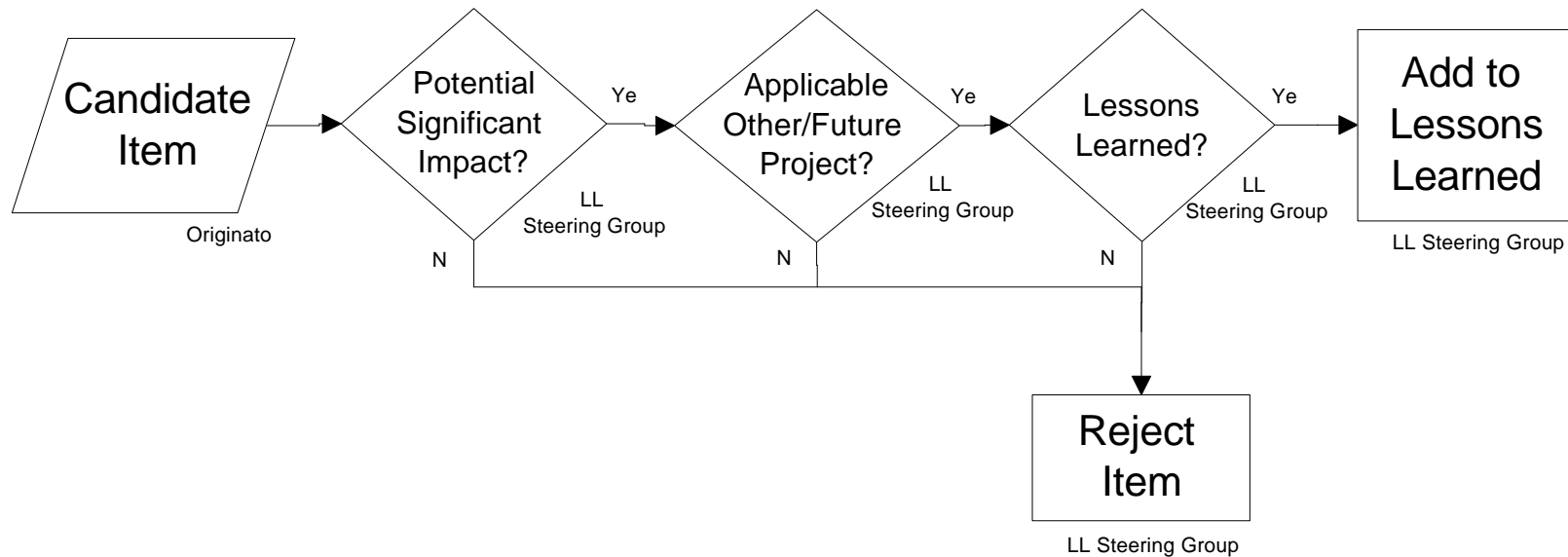
HOW CAN YOU USE THEM?

PROJECT MANAGERS

(H/W Engineering Class, Project Management Class)

Use the Lessons Learned to develop program requirements

Monitor P/FR and Alert/Concern Systems status for your project to assure adequate attention and closeout of technical problems and failures

Lessons Learned Process

Candidate Item

Originato

Potential Significant Impact?

LL Steering Group

Ye

N

Applicable Other/Future Project?

LL Steering Group

Ye

N

Lessons Learned?

LL Steering Group

Ye

N

Add to Lessons Learned

LL Steering Group

Reject Item

LL Steering Group

P/FR Process

Initiate P/FR
Originator

→ Log & Distribute
PFO

→ Approves Closure
CogE/SM

→ Log & Distribute
PFO

→ Assess System Impact
System Engr

→ Log & Distribute
PFO

Verify Adequacy Validate Ratings Approve P/FR
RE/ERE/SSE

→ Log & Distribute
PFO

→ Concurs on Review/ Approval Actions
PAM

→ Red Flag or Issue?

Yes → Approve P/FR with Issue
S/C SM/IM

No → Log & Distribute
PFO

Approves Red Flag P/FR
PM

E-18

Alert Process

Problem Reports Sources: JPL, NASA, GIDEP → EPINS → Logging and Distribution → General Information Distribution, Technical Specialist Review → Program Assurance Manager Review, Safety Operations Review → Closure Reporting

Points of Contact

LL   C. Dumain   X4-8242

P/FR   D. Hoffman   X4-4278

ACS   R. Karpen   X4-8556

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February 3, 1997

ALERT/CONCERN SPECIALIST GUIDELINES

1. PURPOSE

These guidelines are to familiarize Alert/Concern Specialists with the system they are supporting. The guidelines also will discuss the review process Alert/Concern and the kind of information needed by the users of the Alert/Concern System. The overall purpose of the Closed Loop Alert System is to capture information reported by various sources within and outside JPL, distribute it to potentially impacted organizations, and record what corrective actions JPL organizations have taken to resolve each problem. This then provides a tool for recording the problem itself and the Specialist recommendation, for disseminating and tracking closure by flight projects, and for maintaining a reference base to help avoid those problems on future projects.

2. REVIEW PROCESS

Upon receipt of a new problem report by the Closed Loop Alert System, it is assigned a JPL-unique Alert number and logged into the Alert/Concern Subsystem (ACS) of the Electronic Parts Information Network System (EPINS). A copy is sent to an appropriate Specialist within JPL for review and recommendations. The Specialist also determines whether it could be a concern to JPL activities. Upon return, these comments are provided to potential user (e.g., Project Managers, Task Managers, Mission Assurance Managers, Safety Operations, etc.) so they can take appropriate corrective action. At the end of each month, a reminder will be sent to Specialists for Alert/Concerns held over 20 days.

3. REVIEW GUIDELINES

The Specialist will be sent a copy of the Alert/Concern and a partially completed Alert Recommendation form (JPL 0970).

> **NOTE: We really want to disseminate the information to projects as soon as possible, because the farther into the development phase they get before discovering the problem, the harder and more expensive it is to fix. OUR GOAL IS A FIVE-DAY RESPONSE FROM SPECIALISTS. We recognize that this is not always possible, so as a minimum for the "five-day" goal if you could read the Alert/Concern, determine if the problem is a "Concern," and supply the product designator code, affected generic part number(s) and affected product number(s), we'll remind you to give us your recommendations later. This involves doing steps a-c, i, j, and l-n below. If the item is not a concern to JPL, tell us why not, sign and return the packet.**

Your review is captured primarily on the Alert Recommendation form and then copied into the EPINS data base. If you reference additional backup material, then a copy should be sent

back with the form or, for readily available documents, a reference should be made in the context of your comments on the form.

The following guidelines are for filling out the Alert Recommendation form.

In general, as you make entries on the form, please print clearly, so we won't have call you for clarification. It helps, too, if you re-read your comments before sending.

a. <u>Check General Topic</u>. Check the general topic of the Alert/Concern that it is in your realm of expertise. If not, send it back to Alert System Engineer (303-200) with a comment to that effect and suggest someone else, if you can. We will take the Alert/Concern off of your list of assignments and assign it to someone else.

b. <u>Check JPL Alert Number</u>. Check the JPL-unique Alert number <u>problem type character</u> in Block 1. When Alert/Concerns are received at JPL they are assigned JPL Alert Numbers (hand-written at the top of the Alert/Concern) in the format of "*AC-E-92-003*" which stand for:

    1) *AC*   →   Alert/Concern

    2) *E*   →   <u>Problem type character</u>, as follows:
                  C   Chemical
                  E   Electrical/Electronic Component
                  K   Connectors/Cables
                  M   Materials/Hardware
                  P   Mechanical
                  R   Reliability
                  S   Safety

    3) *92*   →   Calendar year received

    4) *003*   →   Log number for each Alert/Concern received that year, in this case the third Alert/Concern received in 1992.

c. <u>Check Basic Alert Information</u>. Check blocks 2, 4, and 6 for correct entries by the Alert Systems Engineer. Line-out discrepancies and enter corrections. If you have any questions, call the Alert System Engineer at X4-8556.

d. <u>List Affected Generics and Part Numbers</u>. Use block 8 or 11 to list other affected products. (See steps i. and j. below.)

e. <u>List Affected JPL Programs</u>. If you actually know that a JPL program is using the item, then provide the program name or acronym in Block 9. Don't spend a lot of time

researching electronic parts. We will be trying to perform an automated scan of Office 507 project parts lists (EPINS EPL), acquisitions (EPINS PTS), and stores/kitting lists (EPINS EPQA) to determine which projects are using the item by searching for the generic or exact product number.

f. <u>List Historic Information</u>. If there might be some historically relevant information, enter or reference it in Block 10.

g. <u>Determine Concern/No Concern</u>. If the problem could apply to actual or potential JPL work (including contracted work), then enter "CONCERN" in Block 11 of the Alert Recommendations form. Otherwise, enter "NO CONCERN." If you think the problem is not a concern, also provide the reason. Don't forget that some of the new projects may use commercial products in the future. Consider using one of the attached checklists (pages E-28 through E-32) to clarify your recommendation.

h. <u>Determine Designator Code</u>. The designator code is a method we use to make coarse groupings of products into families. It was originally taken from electronic parts designations on circuit boards but modified to conform roughly to specialists areas of expertise. Most of the codes are by product but codes 5 (Processes) and 6 (Software) were added for problems where the final hardware product cannot be identified. Select a designator code from the following list and enter into Block 11. For example, enter "DES=C" for a capacitor.

A	Rf and Microwave Devices
B	Optoelectronic Devices
C	Capacitors
D	Diodes
F	Protective Devices (Fuses, Circuit Breakers)
H	Filters, Electronic
J	Connectors
K	Relays
L	Magnetics (Inductors, Transformers, Ferrite Beads)
M	Transducers (Thermistors, Sensors)
Q	Transistors
R	Resistors
S	Switches
U	Microcircuits (Digital, Linear, Hybrids, LSI, ASIC)
W	Wire, Cables
X	Crystals and Crystal Oscillators
Z	Miscellaneous Electrical/Electronics
1	Equipment and Machinery
2	Safety Equipment
3	Raw Materials and Chemicals
4	Fiber Optics
5	Processes

       6   Software
       9   Miscellaneous Products

i. <u>List Affected Generic Part Number(s)</u>. The intent of the generic part or product number is to group similar products likely to exhibit the same problem. Enter all of the generic product numbers that are probably affected by the Alert/Concern in Block 11 or reference attachment. Correlate them to the different designator codes, if there are more than one (but that's highly unlikely).

A list of generic part numbers that have been used in the past are available in EPINS. Commonly used electronic part generic include Mil-spec styles for passive devices, JEDEC semiconductor part number, and MIL-M-38510 Supplement 1 for microcircuits. If you start developing new generic part number for your specialty, try to group by functional use and not too detailed. Consult with the 507 Parts Support Group Supervisor (X4-5590) for further clarification.

j. <u>List Affected Procurement Part Number(s)</u>. This is the product (catalog) number you would write on the purchase order to get the part properly configured and tested. The EPINS program should have capture them from the Alert. Check that they correlate to the different generic product numbers. Enter list of additionally affected part numbers in Block 11 or reference attachment.

k. <u>Enter Recommendations</u>. Enter your recommendations in Block 11. Use the attached checklists (pages E-28 through E-32), if they help.

    1) Corrective actions - If a JPL user or contractor plans to use the affected product, what action would you recommend to mitigate the problem. For example, recommend:

        a) Stop parts on order or change requirements
        b) Place hold on parts in Stores
        c) Re-test parts
        d) Return to vendor
        e) Redesign application to avoid problem

    2) Preventive measures - Summarize what could be done to make sure a project won't experience the problem. For example, recommend:

        a) Remove from preferred parts list
        b) Modify procurement specification
        c) Develop special re-test procedure.

NOTE: Do not enter specific actions or measures for a specific project; this should be included in the Mission Assurance Manager's response for the project.

l. <u>Sign and Date</u>. If you are **NOT** making a interim response, then give us your signature and the date in Block 12.

If you **ARE** making an interim response, initial and date at the end of your comments in Block 11, **DON'T** sign and date the form but sign and date the returned xerographic copy (see next paragraph).

m. <u>Hold Copy</u>. Pull the Canary-colored copy of the form as your hold copy and file in a safe place in case we don't get the original, for whatever reason. If you want to send us an interim response, then write it up on the form but only send us a xerographic copy and hold the form for completing when you make your final response.

n. <u>Attach Referenced Material</u>. Attach copies of limited distribution referenced items (not things like PFRs or military specifications).

o. <u>Return Response</u>. Send interim or final review packet to the Alert System Engineer, M/S 303-200.

IMPORTANT: Upon completing either the "5-day" response or a full response with recommendations, make a hold copy (or pull the Canary-colored sheet) to keep on file in case of the unlikelihood that your response doesn't get back to us.

4. POINTS OF CONTACT

Alert Process Owner	K. Clark	4-7708
Alert System Engineer	R. Karpen	4-8556
Distribution		
Hard Copies		
Internet Access		
Monthly Reports		
Specialist Guidelines		
EPINS Alert Access	C. Erickson	4-7015

SPECIALIST RECOMMENDATION CHECKLIST

Electronic Parts

___Found similar problems in data base (EPINS Alert Query) as follows: _____

_____

___Not applicable to products in actual use or potentially could be used by JPL or its contractors ("No Concern"):

   ___Parts operated outside of spec. limits, derating limits or vendor guidelines.

   ___Parts failed due to secondary effects.

   ___Parts failed as a result of an accident.

   ___Other _____

___Parts are not suspect if parts are subject to the following document(s):

   ___Industry standard_____

   ___JPL specification _____

   ___Military specification _____

___Parts are acceptable if:

   ___Retested to _____

   ___Procure from (approved source) _____

   ___Parts are not of date codes _____

   ___Procured to revised specification _____

   ___Other _____

___Recommend not using in current/future designs and replacing with

_____

___Require special handling/processing as follows: _____

___Recommend removal from Stores and flight hardware, and destroying.

SPECIALIST RECOMMENDATION CHECKLIST

__Mechanical Parts and Structures__

___Parts are acceptable if:

    ___Retested to _____

    ___Procure from (approved supplier) _____

    ___Material is not of date codes _____

    ___Procured to revised specification _____

    ___Supplier/Vendor satisfies JPL QA audit, has material traceability/certification, or is subjected to JPL source inspection/monitoring.

___Procedure(s) that need revision: _____

___Rework

    ___Procedures_____

    ___Special facilities/tools _____

___Require special handling/processing as follows: _____

_____

___Recommend not using in current or future designs and replacing with_____

_____

___Recommend removal from Stores and flight hardware, and destroying.

___Not applicable to JPL. Reason: _____

___Contractors should be alerted. Affected projects, if known: _____

___Additional Comments _____

_____

_____

_____

SPECIALIST RECOMMENDATION CHECKLIST

Materials/Processes

___Parts are acceptable if:

    ___Retested to _____

    ___Procure from (approved supplier) _____

    ___Material is not of date codes _____

    ___Procured to revised specification _____

___Require special handling/processing as follows: _____

_____

_____

___Procedure(s) that need revision:

_____

___Recommend not be using in current or future designs and replacing with:_____

_____

___Recommend removal from Stores and flight hardware, and destroying.

___Rework

    ___Procedures

    ___Special facilities/tools _____

_____

_____

_____

SPECIALIST RECOMMENDATION CHECKLIST

Packaging

___Special handling required

___Cleaning controls to _____

___Electrostatic Discharge control to_____

___Storage controls to _____

___Packing controls to _____

SPECIALIST RECOMMENDATION CHECKLIST

Safety

Contact the Safety Operations (X4-4396) if you have the referenced item.

___Handle in accordance with JPL document _____

_____

___Handle in accordance with _____

_____

___Sent copies of Alert/Concern to all division safety representatives.

___Secure all sites containing the referenced item and notify the Safety Operations (X4-4396).

___Special instructions:_____

_____

_____

_____

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E-33

February 3, 1997

MISSION ASSURANCE MANAGER GUIDELINES

1. PURPOSE

These guidelines are to familiarize Mission Assurance Managers (MAMs) with the Alert/Concern System and their participation in it. The overall purpose of the Closed Loop Alert System is to capture information reported by various source within and outside JPL, verify that it could be a concern to JPL activities, obtain Specialist recommendations, and distribute the Alert/Concern and recommendations to appropriate people (Project Managers, Task Managers, Mission Assurance Managers, Safety Operations, etc.) for investigation in their area, who then respond back as to impact and corrective action. This provides a tool for recording the problem itself and the Specialist recommendation, for disseminating and tracking closure by flight projects, and for maintaining a reference base to help avoid those problems on future projects.

2. ALERT/CONCERN PROCESS

Upon receipt of a new problem report by the Closed Loop Alert System staff, it is assigned a JPL-unique Alert number and logged into the Alert/Concern Subsystem (ACS) within the Electronic Parts Information Network System (EPINS). Copies are sent to an appropriate Specialist within JPL for review and recommendations. Upon return, these comments are provided to potential user so they can take appropriate corrective action. At the end of each month, a reminder is sent to Specialists and MAMs for Alert/Concerns held over 20 days.

A simplified view of the Alert/Concern System is shown in Appendix C of D-11119.

3. CLOSED LOOP PROCESS

The Closed Loop portion of the Alert System is intended to verify that project personnel have reviewed the potential impact of an Alert/Concern with that project. This is accomplished by sending a copy of the Alert/Concern to appropriate projects (usually the MAMs) along with a response form for recording the impact and sending it back for logging in the EPINS Alert System.

Typically, Mission Class A through E are required to perform some form of closure when they are in development phases C or D. The types of exemption from closure include:

- Spaceflight projects in Phase A or B of development
- Spaceflight projects in which all hardware, planned for launching, is launched
- Spaceflight projects where no new hardware will be built
- Software only projects
- Waiver from the closure process in SPI 7-01-14

If your project is not an active Phase C or D spaceflight hardware build, then we will not send you a packet for that project; or we will send you a packet but it will be marked "FOR IN-FORMATION ONLY." Mission Class D and E projects are only required to close on Safe-Alerts relating to flight hardware, but we will sent out Parts, Materials and Process Alert problems for information only.

If you feel your project should be exempt from closure, talk to the Mission Assurance Office Manager (X4-5335) or Alert System Engineer (X4-8556).

4. MAM REVIEW GUIDELINES

The MAM will be sent a copy of the Alert/Concern, a Questionnaire form for reply, and a copy of the Specialist Alert Recommendation form (JPL 0970), if it is available. The review form that you review will be partially filled in by the Alert System Engineer to identify the JPL unique Alert Number (ACS Log Number on the form) and the number of the source document (under the assigned date).

> **NOTE: In our attempt to disseminate the information to MAMs as soon as possible, we may be sending out Alert/Concerns without Specialist recommendations. Our goal is a five-day response from Specialists, but this is not always possible, so the "five-day" response may only have a determination whether the problem is a "Concern" or not, the product designator code and affected generic and product numbers. We'll pass on their recommendations later.**

a. <u>Traditional Review Approach</u> - One approach used regularly by MAMs is to either personally, or by forwarding the packet to the appropriate CogE(s), contractor, or Parts Rep(s), fill out the Alert Feedback Questionnaire and return it to the Alert System Engineer. Should you want additional information from the Specialist, their name is written in the top margin of the Alert/Concern document. Although the Specialists are supported by institutional funds for their preliminary recommendations sent to us, you should be ready to provide them a project account code for further advice on your project.

Unfortunately, many MAMs hold on to the Alert Feedback Questionnaire form until completion of their review and do not return it in the 20 days requested. Some also have not returned it due to the concern that future parts list submitted may list the item and they might be missed. To somewhat alleviate this latter problem, Office 507 has instituted two checks in their processes to catch items that are selected later. One is the requirement for Parts Specialists to specifically sign off that no Alerts applied when they review and approve a Parts Pedigree Travelers (necessary before ordering parts). Even if Office 507 is not ordering parts for your project, if you have the parts lists entered into the EPINS Electronic Parts List (EPL) the software will check each entry against the Alert System data base and flag parts that may be suspect.

The following guidelines are for responding to an Alert.

1) <u>Operational Concern</u>. Is it possible that a current project is using or planning to use the subject part, material or process?

2) <u>Parts Usage</u>. Are any of the parts in acquisition process (selection through kitting)?

    a) Review Parts Lists submitted by design activities for the suspect part numbers or generic part types. The EPINS Alert System can be used to search your project lists in the Electronic Parts List (EPL) files.

    b) Do you currently use the suspect part numbers or generic equivalents?

    c) Are the parts listed in the project APL?

    d) Are the parts on order? (Check PASOs and PRs. You might be able to query the EPINS Parts Tracking System.)

    e) Are the parts in Stores? (Check Quality Assurance or Parts Rep. You might be able to query the EPINS Electronic Quality Assurance subsystem.)

    f) Are the parts kitted out? (Check SEKLRs. You might be able to query the EPINS Parts Tracking System.)

    g) Are the parts built into the hardware? (Check as-built lists in Section 356. If EPL reflects your as-built list, you might be able to query the EPINS EPL subsystem.)

If you find that you are not using the product, you only need to indicate that the problem will not be a risk in step d, disposition as "CLOSED" in step e because of no usage and move on to step f below.

b. <u>Alternate (Monthly) Review Approach</u> - It has been proposed that a summary report be provided to the MAMs once a month that list the JPL and Source Alert Numbers, the generic part number, affected date codes, description of the parts, and manufacturer name. With this list, the MAMs could make a preliminary query to their CogEs, contractors and Parts Reps to see if there is any usage of the part. If not then just complete the Questionnaire (steps e - i above). If there is a usage then back to step c for that subsystem and report the results.

c. <u>Application Review</u>. Have the CogEs and contractor check their designs to see if the suspected defect could compromise the function or reliability of the circuit.

d. <u>Risk Assessment</u>. Contact Parts Support Group (X4-5590) of the Electronic Parts Engineering Office or the Product & Circuit Reliability Group (X4-9282) of the Reliability Engineering Office.

e. <u>Disposition</u>. Note as "Interim" or "Closed" with a description of the actions taken or planned.

f. <u>Sign and Date</u>. If you are **not** making a interim response, then give us your signature and the date in Block 12.

If you **are** making an interim response, initial and date at the end of your comments inside the Questionnaire block, **don't** sign and date the form but sign and date the returned xerographic copy (see paragraph m. below).

g. <u>Hold Copy</u>. Make a copy of the form as your hold copy and file in a safe place in case we don't get the original, for whatever reason. If you want to send us an interim response, then write it up on the form but only send us a xerographic copy and hold the form for completing when you make your final response.

h. <u>Attach Referenced Material</u>. Attach copies of limited distribution referenced items (not things like PFRs or military specifications).

i. <u>Return Response</u>. Send interim or final review packet to the Alert System Engineer, M/S 303-200.

Your review is captured primarily on the returned e-mail and then copied into the EPINS data base. If you reference additional backup material, then a copy should be sent back with the e-mail or, for readily available documents, a reference should be made in the context of your comments in the e-mail message.

IMPORTANT: Upon completing either the "20-day" response or a full response, make a hold copy to keep on file in case of the unlikelihood that your response doesn't get back to us.

5. BACKGROUND INFORMATION

a. <u>Generic Part Number(s)</u>. The intent of the generic part or product number is to group similar products likely to exhibit the same problem. The Specialist will list all of the generic product numbers that are probably affected by the Alert/Concern in Block 11 or reference an attachment. They should be correlated to the different designator codes, if there are more than one (but that's highly unlikely).

A list of generic that have been used in the past are available in EPINS. Commonly used electronic part generic include Mil-spec styles for passive devices, JEDEC semiconductor part number, and MIL-M-38510 Supplement 1 for microcircuits. If a Specialist can use

one of the commonly used generics, they will create one from the manufacturer catalog number and try to group by functional use and technology while not being too detailed. Consult with 507 Parts Support Group Supervisor (X4-5590) for further clarification of generic part number rules.

b. <u>Specialist Recommendations</u>. The Specialist will enter their recommendations in Block 11 of their reply form.

    1) Corrective actions - If a JPL user or contractor plans to use the affect product, what action would the Specialist recommends to mitigate the problem (e.g., re-screen the parts).

    2) Preventive measures - Summarize what could be make sure a project won't experience the problem (e.g., avoid the product, manufacturer, or date code; buy to control specification, etc.)

    NOTE: The Specialist will not enter specific actions or measures for a specific project; this should be included in the MAMs response.

6. POINTS OF CONTACT

Alert Process Owner   K. Clark   4-7708
Alert System Engineer   R. Karpen   4-8556
      Distribution
      Hard Copies
      Internet Access
      Monthly Reports
      Specialist Guidelines
EPINS Alert Access   C. Erickson   4-7015

March 15, 1994

SAFETY REPRESENTATIVES GUIDELINES FOR SAFE-ALERTS

1. PURPOSE

These guidelines are to familiarize Division and Section Safety Representatives with the Alert/Concern System and their participation in it. The overall purpose of the Closed Loop Alert System is to capture information reported by various source within and outside JPL, verify that it could be a concern to JPL activities, obtain JPL Specialist recommendations, and distribute the Alert/Concern and recommendations to appropriate people (Project Managers, Task Managers, Mission Assurance Managers, Safety Office, Safety Reps, etc.) for investigation in their area, who then respond back as to impact and corrective action. This provides a tool for recording the problem itself and the Specialist recommendation, for disseminating and tracking closure for flight projects and safety personnel, and for maintaining a reference base to help avoid those problems on future projects.

2. ALERT/CONCERN PROCESS

When a new problem report is received by the Closed Loop Alert System staff, it is assigned a JPL-unique Alert number and logged into the Alert/Concern Subsystem (ACS) within the Electronic Parts Information Network System (EPINS). Copies are sent to an appropriate Specialist within JPL for review and recommendations. Upon return, these comments are provided to potential user so they can take appropriate corrective action. At the end of each month, a reminder is sent to Specialists and MAMs for Alert/Concerns held over 20 days.

A simplified view of the Alert/Concern System is shown in Appendix A.

3. CLOSED LOOP PROCESS

The Closed Loop portion of the Alert System is intended originally to verify that projects have reviewed the potential impact of an Alert/Concern with that project. This is accomplished by sending a copy of the Alert/Concern to appropriate projects (usually the MAMs) along with a response form for recording the impact and sending it back for logging in the EPINS Alert System. Most of the problem reports sent to the projects concern defective parts and materials, but some safety issues also impact them.

Conversely, most of the problem issues sent to the Safety Office and distributed to safety reps involve safety issues (in the form of GIDEP Safe-Alerts) but occasionally you may see a part/material/equipment defect report that has safety implications.

4. REVIEW GUIDELINES

The Safety Representative will be sent a copy of the Safe-Alert by the Safety Office. They would like you to review for possible impact in your area and to report it back to them. They in turn will combine the responses and report them back to the Closed Loop Alert System.

a. Traditional Review Approach - Each rep should review the report and determine, possibly with the help of the JPL Specialist, which appropriate CogE(s), Tech Managers, contractors, or personnel in your organization should be notified and asked to respond regarding the impact of the report's problem.

   The following guidelines are for responding to the Safety Office.

   1) Operational Concern.

      a) Is an organization or facility using or planning to use the subject part, material or process?

      b) Does your organization "own" or use a process that is affected by the safety issues?

   2) Parts/Materials Usage. Are any of the parts or materials in the acquisition process?

      a) Do you currently use the suspect part numbers or generic equivalents?

      b) Do you obtain these parts or materials from stores? Which stores?

      c) Are the parts built into equipment?

   If you find that you are not using the defective product or process, you only need to indicate to the Safety Office that the problem will not be a risk because of no usage.

b. Application Review. Have the CogEs and contractor check their designs to see if the suspected defect could compromise the safety of the equipment.

c. Disposition. Note explicitly if your response is "Interim" or "Closed" with a description of the actions taken or planned.

d. Sign and Date. Let the Safety Office know the extent of coverage for your response..

e. Hold Copy. Make a copy of your response and file in a safe place in case we don't get the original, for whatever reason.

f. <u>Attach Referenced Material</u>. Attach copies of <u>limited</u> distribution referenced items (not things like PFRs or military specifications).

g. <u>Return Response</u>. Send interim or final review packet to the Safety Office, Attn: C. Fliege, M/S 190-112.

5. BACKGROUND INFORMATION

a. <u>Generic Part/Material Number(s)</u>. The intent of the generic part or product number is to group similar products likely to exhibit the same problem. The Specialist will list all of the generic product numbers that are probably affected by the Alert/Concern in Block 11 or reference an attachment.

A list of generic that have been used in the past are available in EPINS. Commonly used electronic part generic include Mil-spec styles for passive devices, JEDEC semiconductor part number, and MIL-M-38510 Supplement 1 for microcircuits. If a Specialist can use one of the commonly used generics, they will create one from the manufacturer catalog number and try to group by functional use and technology while not being too detailed. Consult with 514 Acquisition Group Supervisor (X4-3264) for further clarification of generic part number rules for electronic parts. Rules for describing materials and processes generically have been crudely lumped into the following categories:

6. POINTS OF CONTACT

Alert Process Owner   K. Clark 4-7708
Alert System Engineer   R. Karpen 4-8556
   Distribution
   Hard Copies
   Internet Access
   Monthly Reports
   Specialist Guidelines
EPINS Alert Access   C. Erickson 4-7015
Safety Office   C. Fliege 4-4396

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APPENDIX F:
DETAILED PROCEDURES FOR REPORTS

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Appendix F-1

Summary Report

This report summarizes the Alert/Concern information for a given month. It is usually prepared and distributed by the Alert System Engineer on a monthly basis to projects and interested parties.

Detail Procedure
  a. **Check** that all Specialist's responses for previous month have been logged.
  b. **Log onto EPINS**
  c. **Select** or switch to "**NETWORK APPLICATIONS**" in Main Menu or Windows.
  d. **Select "4** Alert/Concern System"
  e. **Select "2** Reports Menu"
  f. **Select "1** Status Report Menu"
  g. **Select "4** Alert/Concern Summary Report"
  h. **Press [Home]** key to start printout.
  i. **Press** "**P** Printer Direct" and press [Enter].
  j. **Press [Enter]** for continuing.
  k. **Press [Enter]** again for continuing.
  l. **Press [Enter]** to accept title.
  m. Enter two digits (e.g., 05 for May) for the month reported.
  n. Enter the four digits of the reported calendar year.
  o. **Press [Enter]** for "Update Alert/Concern Status? (Y/N)".
  p. When the search has been completed, **Press [E]** and **[Enter]** to return to the Status Reports Menu.
  q. **Press [Esc]** twice, then **[End]** twice to leave EPINS.

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Appendix F-2

Status Report

This report provides a status of project responses for each open Alert/Concern. It can used by projects to get a listing of Alert/Concerns still open against their project.

Detail Procedure
a. **Check** that all Specialist's responses for previous month have been logged.
b. **Log onto EPINS**
c. **Select** or switch to "**NETWORK APPLICATIONS**" in Main Menu or Windows.
d. **Select "4** Alert/Concern System"
e. **Select "2** Reports Menu"
f. **Select "1** Status Report Menu"
g. **Select "3** Active Alert/Concern Report"
h. **Press [Home]** key to start printout.
i. **Press** "**P** Printer Direct" and press [Enter].
j. **Press [Enter]** for continuing.
k. **Press [Enter]** again for continuing.
l. **Press [Enter]** to accept title.
m. Enter two digits (e.g., 05 for May) for the month reported.
n. Enter the four digits of the reported calendar year.
o. **Press [Enter]** for "Update Alert/Concern Status? (Y/N)".
p. When the search has been completed, **Press [E]** and **[Enter]** to return to the Status Reports Menu.
q. **Press [Esc]** twice, then **[End]** twice to leave EPINS.

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Appendix F-3

Specialist Reminder Report

This report is used to remind Specialists of Alert/Concerns submitted to them and not received back by the Alert System Engineer within 30 days.

Detail Procedure
   a. **Check** that all Specialist's responses for previous month have been logged.
   b. **Log onto EPINS**
   c. **Select** or switch to "**NETWORK APPLICATIONS**" in Main Menu or Windows.
   d. **Select "4** Alert/Concern System"
   e. **Select "2** Reports Menu"
   f. **Select "2** Administrative Report Menu"
   g. **Select "6** Overdue Reminder Report"
   h. **Cursor down** to "(S)PEC, (R)EP, (P)AM", **enter "S"** and **press [Enter] twice.**
   i. **Press [Home]** key to start printout.
   j. **Press P**(rinter) or **B**(atch) or **T**(Print Mgr) and press [Enter].
   k. **Press [Enter]** for continuing.
   l. **Press [Enter]** again for continuing.
   m. **Press [Enter]** to accept title.
   n. **Press "05" and [Enter]** for days overdue.
   o. **Press "E"** to exit.
   p. **Press [End]** to quit **or select "2".**

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Mission Assurance Manager
Reminder Report

This report is used to reminder Mission Assurance Managers of Alert/Concerns that have been assigned to their project but have not been closed. This report provides a simple listing of open Alerts versus the more detailed Project Alert Status Report (Appendix F-6) that also gives part numbers, manufacturers, and date codes.

Detail Procedure
    a. **Check** that all MAM's responses for previous month have been logged.
    b. **Log onto EPINS**
    c. **Select** or switch to "**NETWORK APPLICATIONS**" in Main Menu or Windows.
    d. **Select "4** Alert/Concern System"
    e. **Select "2** Reports Menu"
    f. **Select "2** Administrative Report Menu"
    g. **Select "6** Overdue Reminder Report"
    h. **Cursor down** to Name and **enter each MAM name** for projects in closed loop . The steps 7 through 14 must be repeated for each "closed-loop" **MAM**.
    i. For "(S)Pec, (R)Ep, (P)Am", **enter "P"** and **press [Enter] twice.**
    j. **Press [Home]** key to start printout.
    k. **Press P**(rinter) or **B**(atch) or **T**(Print Mgr) and press [Enter].
    l. **Press [Enter]** for continuing.
    m. **Press [Enter]** again for continuing.
    n. **Press [Enter]** to accept title.
    o. **Press [Enter]** to accept 30 for days overdue.
    p. **Press "E"** to exit **or enter "R"** to restart report for next **MAM**.
    q. **Press [End]** to quit.

Detailed Product Report
By Document Type

This report provides detail parts information on Alert/Concerns received during a given reporting period (typically monthly). It is commonly used by Mission Assurance Managers, CogEs, Parts Reps and contractors to check applicability of Alert/Concerns against as-designed and as-built parts lists.

Detail Procedure
   a. **Check with Alert System Engineer** that all Alert/Concerns received during the previous month have been logged.
   b. **Log onto EPINS**
   c. **Select** or switch to "**NETWORK APPLICATIONS**" in Main Menu or Windows.
   d. **Select "4 Alert/Concern System"**
   e. **Select "2 Reports Menu"**
   f. **Press** [**F10**] key.
   g. **Select "MONTHLY DETAIL PRODUCT REPORT"** by highlighting and pressing [Enter] key.

   NOTE: Recommend putting [Caps Lock] on.

   h. **Enter** the **JPL Alert Number range** to be reported. Since three reports are made (one for Chemicals, one for Electronic Parts, and one for Materials & Processes), steps 6 through 13 must be repeated three times, once for each report.
        1) For the first report, use "AC-C" for the starting JPL Alert Number and "AC-C-999" for the last JPL Alert Number.
        2) For the second report, use "AC-E" and "AC-K-999".
        3) For the third report, use "AC-M" and "AC-R-999".
   i. **Enter** the **start date** of the month to be reported (e.g., 030193 for March 1993) and press [Enter] key.
   j. **Enter** the **last date** of the month to be reported (e.g., 033193 for March 1993) and press [Enter].
   k. **Press P**(rinter) or **B**(atch) or **T**(Print Mgr) and press [Enter].
   l. **Press [Enter]** for continuing.
   m. **Modify title** to match the report selected in step 7 above, e.g.,
        1) Use "MONTHLY CHEMICAL ITEM REPORT" for "AC-C" through "AC-C-999".

2) Use "MONTHLY ELECTRONIC PART REPORT" for "AC-E" through "AC-K-999".

3) Use "MONTHLY MATLS & PROCESS REPORT" FOR "AC-M" through "AC-R-999".

n. **Select 4** to do the next report (return to step 7 above) **or press [End]** key to exit to the Alert System Menu.

o. **Press [End]** to exit to EPINS Menu.

Appendix F-6

Project Alert Status Report

This report provides detail parts information on Alert/Concerns still open for a given project and whether the part is listed in EPL for that project. It is commonly used by Mission Assurance Managers, CogEs, Parts Reps and contractors to check applicability of Alert/Concerns against as-designed and as-built parts lists.

Detail Procedure
   a. **Log onto EPINS**
   b. **Select** or switch to "**NETWORK APPLICATIONS**" in Main Menu or Windows.
   c. **Select "4 Alert/Concern System"**
   d. **Select "2 Reports Menu."**
   e. **Select "2 Administrative Reports."**
   f. **Select "8 Project Alert Status Report."**
   g. **Press the [Home] key** to go to the print mode.
   h. **Select "P Printer Direct"**.
   i. **Press [Enter]** until you are back to the "Administrative Report Menu."
   j. Exit and retrieve printout.

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Individual GIDEP Alert Download

This is process for retrieving individual Alerts (versus all Alerts issued since the last update; see Appendix F-8) from the Government Industry Data Exchange Program (GIDEP). This process does not apply for internal JPL documents or documents received directly from other NASA Centers. There are four alternative sources, and seven ways, for retrieving Alerts. The sources are JPL Office 507 hard copy files, Office 507 EPINS database, Office 507 Website, GIDEP Operations Center, and GSFC's EPIMS database. The information needed for each source and copies types available is identified in the following table.

Source	Necessary Lookup Info.[1]	Available Data Types	Access Requirements
Office 507 Files	JPL Alert No.	Hardcopy of Alert Specialist Response Project Replies	File Cabinet Key
Office 507 EPINS	JPL Alert No. Source No. Generic part no. Mfr. ID	Summary Part No. List Specialist Response Project Replies	User ID Password
Office 507 Website	JPL Alert No. Source No. Generic part no. Mfr. ID	Text file Summary Part No. List Specialist Response Project Replies	IP address ending with *jpl.nasa.gov*
GIDEP Website	GIDEP File No. Source No. Generic part no. Mfr. CAGE Code	Text File Image File Summary	User ID Password

(Table continued on next page)

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[1] Requires one of the types of information listed. Some general types of information, such as CAGE code, may give all documents having that information. Some sources allow multiple selections.

Source	Necessary Lookup Info.[1]	Available Data Types	Access Requirements
GIDEP Client/Server	GIDEP File No. Source No. Generic part no. Mfr. CAGE Code	Text File Image File Summary	User ID Password
GFSC EPIMS Website	Source No. Generic part no. Mfr. CAGE Code	Text File Image File Summary	User ID Password
GIDEP via Modem	Source No. Date or date range	Text File Image File	User ID Password

1. Detail Procedure - Office 507 Hardcopy Files
    a. Obtain JPL Alert number (e.g., AC-S-97-021).
        1) **If you have a copy of the JPL-distributed document**, the JPL Number will been hand marked in the top margin on the first page.
        2) **If you found the information in EPINS** and want to look at the file copy, copy down the AC number from EPINS for the desired document.
        3) **If you have the Alert (Source) Number or part number**, look up the document in EPINS and copy down the JPL Number.
        4) **If you have the GIDEP file number** (typically five digits, also used as the file name in EPINS), then look up the GIDEP file number in the Alert Log (binder) and copy down the JPL Number for the document. If the log is not available, search either EPINS or GIDEP for the file number, get the source number then look up the source number in EPINS for the JPL Number.
    b. Unlock the Alert File Cabinet.
    c. Find the folders grouped by year (last two digits of JPL Number).
    d. Alerts are ordered by three digit number ahead of the year. Return original to folder and lock cabinet.
    e. If Alert is not in the appropriate folder, check with the Alert System Engineer if it is still in one of the processing folders in their office.

2. Detail Procedure - Office 507 EPINS Database
    a. Log onto EPINS
    b. Select "2. EPINS APPLICATIONS" in Start Up for EPINS
    c. Select "4. Alert/Concern System" in Main EPINS Menu.
    d. Select "2. Reports Menu."
    e. Select "1. Status Reports Menu"

---

[1] Requires one of the types of information listed. Some general types of information, such as CAGE code, may give all documents having that information. Some sources allow multiple selections.

     f. Depending on the type of information needed and the type of search information available, select "1. Nomenclature/Summary Report" or "2. Detailed Product Report".

3. Detail Procedure - Office 507 Website
    a. Open Internet browser.
    b. Link to URL *http://nppp.jpl.nasa.gov/507/clas/cla-syst.htm*.
    c. Select **Search Alerts** button.
    d. Select type of query based on search information available.

4. Detail Procedure - GIDEP Website (beta test)
    a. Open Internet browser.
    b. Link to URL *http://gidep-data.corona.navy.mil/*
    c. Logon to GIDEP.
    d. Select "Failure Experience".
    e. Select search fields (depends on info you have available.)

5. Detail Procedure - GIDEP Client/Server
    a. Activate GIDEP Client/Server application.
    b. Press "Connection" button.
    c. Logon to GIDEP.
    d. Select "Search" button.
    e. Select search area.
    f. Select specific search field(s).
    g. Pres "Search" button.

6. Detail Procedure - GSFC EPIMS Website
    a. Open Internet browser.
    b. Link to URL *http://epims.gsfc.nasa.gov/*
    c. Select "EPIMS-Web".
    d. Type in UserID and password.
    e. Select "Alert Search".
    f. Enter/select search information in appropriate windows.
    g. "Execute Search."

7. Detail Procedure - Modem Download from GIDEP
    a. Making Connection
        1) Turn on the computer, modem and monitor.
        2) Type **4** and **[Enter]** to continue login.
        3) Type in your **EPINS name** and press **[Enter]**.
        4) Type in your **EPINS password** and press **[Enter]**.
        5) Press **[Enter]** to select Windows.
        6) Double-click the **Departmental** icon.
        7) Double-click the **GIDEP** icon.
        8) Pull down **Phone** menu and highlight **Dial/Connect** and release mouse button.

> Software will attempt to connect to GIDEP computer.
> Should it fail click on **OK** and restart at step 7) above.

     9) Enter **GIDEP ID** and press **[Tab]**.
    10) Enter **GIDEP password** and press **[Enter]**.

b. Document Search
    1) Press **[Enter]** to go to **GIDEP Data Base**.
    2) Click on boxes for "**ALERT**", "**PROBLEM ADVISORY**", "**SAFE-ALERT**", and "**AAN**" and **OK** button.
    3) Click on **Restrict** button.
    4) Download options:
       a) DOWNLOAD by Month**.** Click on the empty box to the right of the DDate button and enter **year/month** for the month you want to download (e.g., **9401** for Jan 1994) and press **[Enter]**. *Use this method for regular download of text files*.
       b) DOWNLOAD by Source Number**.**   Click on the empty box to the right of the DOC button and enter the **document number** (e.g., BP6-A-94-07) and press **[Enter]**. *Use this method to download needed images*.
    5) Click on **Search** button. [Top of next screen tells you how many documents were found.]
    6) **Double-click** on the lines of the **documents** wanted. (They will then appear in the lower box.)
    7) For text, check that **Whole Document** button is selected. For images, select the **Selected Document Part(s)** button, click on **Image List**, and then double-click on the desired image numbers.
    8) Click on **View** button.
    9) Repeatedly click the **Save, OK** and **Next** button until all of the documents have been selected for download or a window pops up stating :

> **STOP. The last document is on display.**

    10) Click on **Cancel**.
    11) Click the **Main Menu** button.

c. Download Documents
    1) Select **File Download** and press **OK**.
    2) Select **Text** and press **OK**.

> Kermit File Tranfer Data window will show the
> download in progress. Files will download into
> the EPINS directory F:\USERS\ALERT\COMM-
> WIN as DOC001$$, DOC002$$, etc. for text, and
> as ELT, ELT00001, etc. for images.

    3) When the download is complete, press **OK** or [Enter].

d. Exit GIDEP
    1) Click on **Exit** to exit GIDEP.
    2) Click on **OK** or press [Enter] to quit G-com..

Appendix F-8

Weekly Alert Download from GIDEP

The following procedure is used to remotely download text of Alerts and their images from the Government Industry Data Exchange Program (GIDEP) for EPINS. Because of GIDEP Program constraints, a password is necessary to access the EPINS and GIDEP computers. [Note: First time setup is necessary for the a new person downloading. Copy *alerts.lst* and *dms.lst* (SQL scripts) from GIDEP directory */home/ind/e4004/* to your own GIDEP directory. To be able to run scripts, they must be located in your directory (e.g., */home/ind/e4002*) at GIDEP. The lists will show source/document number, document date, type of document and text file name.]

     a. Create List of GIDEP Files
          1) Connect to GIDEP (137.67.9.13) using Host Presenter application, or equivalent.
          2) Logon to GIDEP.
          3) Select "3. GIDEP Command Line (SQL)" from the menu.
              a) At the prompt 'SQL>' , type in ***@alerts[Enter]***.
              b) When the list is completed and the 'SQL>' appears, type in ***exit[Enter]***.
          4) Select "0. Exit/Cancel".
          5) Exit Host Presenter application.

     b. Download List of GIDEP Files

Windows	DOS
1) Go to Windows FTP utility and enter IP address for GIDEP, (i.e., **137.67.9.13**).	1) Set local directory to **www:\alrftp** (usually r:\alrftp\...).
2) Set local directory to **www:\alrftp**.	2) Invoke ftp.
3) Set remote directory to **/home/ind/<your GIDEP user id>**, e.g., *e4004*.	3) Connect to GIDEP, (i.e., **connect 137.67.9.13**).
4) Click on **Connect** button.	4) Type in GIDEP user id and password again.
5) Type in GIDEP user id / password again.	5) Type in **prompt [Enter]**
6) Verify **binary** transfer mode.	6) Type in **binary [Enter]**.
7) Select **alert.lst** in the remote directory.	7) Type in **get alert.lst**.
8) Click on the transfer button [⇦].	8) After the files have been transferred, type **Exit [Enter]**.
9) After the files have been transferred, click on the **Exit** button.	

     c. Download Text Files

NOTE: Download is automatically scheduled to occur on the Saturday midnight of every week whether or not the "alert.lst" file was updated. So if you download the "alert.lst" (and GIDEP had new ones) the new Alerts will be here on Monday.

d. Convert Image Files
  1) Load Hijaak.
  2) Select convert
     a) Select TIFF
     b) Select R:\alrftp\img
     c) Select all.
  3) Exit Hijaak.
  4) Enter EPINS.
  5) Select **"4. Alert/Concerns System".**
  6) Select "**5. Utilities Menu".**
  7) Select "**11. Schedule Alert Download/GIF Transfer."**
  8) Select "**2. GIF Transfer."**
  9) Select "**Y(es)"** to initiate the transfer. **NOTE:** Download should begin immediately.
  10) Exit EPINS.

e. Process Text Files into EPINS
  1) Exit Windows and access EPINS (type **EPIN [Enter]** at the DOS prompt.)
  2) Select **2. EPINS Applications REAL under DOS** and press **[Enter]**.
  3) Press **[Enter]** to get passed Title Page.
  4) Select **4. Alerts/Concerns System** and press **[Enter]**.
  5) Select **1. Data Entry Menu** and press **[Enter]**.
  6) Select **7. Enter/Maintain Transferred Alerts** and press **[Enter]**.
  7) Select **1. Edit Transferred Records** and press **[Enter]**.
  8) Select **1. View Alerts by Control** # and press **[Enter]**.
  9) [If "*There are no records to edit*" message appears, check previous steps, 1-44, of process or have someone verify that there were any new documents at GIDEP to download].
  10) Numbering/Transferring Process

   There are basically two types of documents to process; AAN and Alerts. AAN reports always have a Source# starting with "AAN-U-". All of the rest of the reports should be processed as Alerts.

   In all cases, a unique JPL Alert# is assigned to each document. See Appendix G-1 for guidelines on assigning JPL Alert#.

   a) General Instructions - Consider using the *NEW ALERT/ CONCERN PROCESS* slip (C:\alertsys\forms\slips.doc) to track the following steps.

      1) Review each document for applicability to JPL. If not sure, submit to specialist for recommendation. If not applicable, enter as No Concern.

      2) Check the title (or view the text file) to determine the problem type (for assigning the JPL Alert number.)

      3) Log the **Date** of download, **File** #, **Source** #, **JPL Alert** # and **Specialist** (or "N.C." for No Concern) in the Incoming Alert Log binder.

   b) AANs (Agency Action Notices) Processing

1) Assign a JPL Alert#. For documents not applicable and therefore not submittable to Specialists, enter JPL Alert# as AC-N-*iii-yyr,* where *iii* is the next number available in the Incoming Alert Log, *yy* is the last two digits of year it was issued (the year the original AAN if a revision), and *r* is the next revision letter after the last one with the same JPL Alert#. For example, if the last JPL Alert# assigned was AC-C-023-96, the AAN would be assigned *AC-N-024-96* if not applicable to JPL (typically nuclear power plant problems) *or AC-S-024-96B* if it was a JPL-applicable safety problem and it was the second revision.

2) Press **[Home]**.

3) Press **T** to transfer record to EPINS.

c) Alerts, Problem Advisories, etc. Processing

1) Assign logged JPL Alert#.

2) Press **[Home]**.

3) Press **T** to transfer record to EPINS.

d) Print a text copy of all documents. Hand print the Specialist's name and JPL Alert# in the top margin of the first page of each document. Omit Specialist name for documents not applicable to JPL.

e) Send a copy of each printout to respective Specialists along with a partially completed (blocks 1-6) Alert Recommendation form (JPL 0979 R 1/83). Pull the pink suspense copy and file with document in a folder labeled for the month's download, e.g., "May 96".

f) Send a copy of all of the text files for the safety issues via ccMail to the person(s) identified by Fred Sanders (X4-2065). (See Public Mail Lists in ccMail:)

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Project Alert Aging Report

This metric report shows how long currently open Alert/Concerns have been open for a given project.

Detail Procedure:
   a. **Log onto EPINS**
   b. **Select** or switch to "**EPINS APPLICATIONS**" in Main Menu or Windows.
   c. **Select "4 Alert/Concern System"**
   d. **Select "2 Reports Menu"**
   e. **Select "2 Administrative Reports Menu."**
   f. **Select "9 Open Alert Aging Metric (By Project)."**
   g. **Press [Home]** key to go to output mode.
   h. **Press "D File dBase."**
   i. **Press [Enter]** to continue.
   j. **Press [Enter]** to accept title.
   k. **Press [Enter]** to not accept totals only.
   l. **Note the file name and location** in the middle of the fifth line from the bottom of the screen (E.g., "*Writing to H:\USER\<your name>\ALCNUR35.DBF*.") This is where the dBase file will be sent.
   m. Leave EPINS.
   n. Load **EXCEL**
   o. Select **File** from menu strip.
   p. Select **Open**.
   q. Reset **File Name** to "*.DBF"
   r. Reset **Directories** to the directory in step l. above. (Typically, *H:\USER\<your name>*).
   s. Highlight the saved file (typically "**alcnur35.dbf**").
   t. Press **OK** button or press [Enter].
   u. Select column **N**, then **Edit**, then **Delete**.
   v. Replace cells in line 1 with "Project", ">12", ">11", ... ,">1", "<1".
   w. Select and highlight ("click and drag") block A2:N11 (Note: If there are more than ten projects that require closure, change N11 to N<n+1> where n is the number of projects.)
   x. Select **Data** and **Sort**. Change 1st key to **Descending**. Click **OK** button or press [Enter].
   y. Select and highlight block A1:N11 to include date labels.
   z. Press [Chart Wizard] button (just left of arrow-question mark button).
   aa. Move to an open area of the spreadsheet and open a graph box by clicking and dragging the mouse.

ab. The Chart Wizard window should list the part of the spreadsheet table selected in step y. Press **Next>** button or press [Enter].
ac. Select **Area** chart type and press [Enter].
ad. Select **Next>** to select format 1.
ae. Press **Next>** or [Enter].
af. Type "**Age of Open Alerts**" in the Chart Title window. Press [Enter].
ag. Type "**Months Old**" in the Category (X). Press [Enter].
ah. Type "**No. of Alerts**" in Value (Y). Press [Enter].
ai. Double click on **Graph**.
aj. Select **File** and **Page Setup**.
ak. Select **Landscape**. Delete default symbols under **Header** and **Footer**. Press **Print**.
al. Press **OK** to perform printout.
am. Click on spreadsheet (or close chart) to exit chart.
an. Save file, if desired.

Project Alert History Report

This report provides detail parts information on Alert/Concerns still open for a given project.

Detail Procedure:
a. **Log onto EPINS**
b. **Select** or switch to "**EPINS APPLICATIONS**" in Main Menu or Windows.
c. **Select "4 Alert/Concern System"**
d. **Select "2 Reports Menu"**
e. **Select "2 Administrative Reports Menu."**
f. **Select "A Alert Activity History Report."**
g. For **Proj Type** selection range:
    1) Place cursor <u>on</u> the **A** in the "from" column.
    2) Press **[Ctrl]-[Home]**.
    3) Select "**3 Match (Exactly)**" and press **[Enter]**.
    4) Press **[Enter]** to indicate "case sensitive".
    5) Press **A** and then **[Enter]**.
    6) Press **S** and then **[Enter]**.
    7) Press **[Enter]**.
    8) Press **[Home]**.
h. **Press "D File Dbase."**
i. **Press [Enter]** to continue.
j. **Press [Enter]** to accept title.
k. **Press [Enter]** to <u>not</u> accept totals only.
l. **Note the file name and location** in the middle of the fifth line from the bottom of the screen (E.g., "*Writing to H:\USER\<your name>\ALCNU35A.DBF*.") This is where the dBase file will be sent.
m. Leave EPINS.
n. Load **EXCEL**
o. Select **File** from menu strip.
p. Select **Open**.
q. Reset **File Name** to "*.DBF"
r. Reset **Directories** to the directory in step m. above.
s. Highlight the saved file (typically "**alcnu35a.dbf**").
t. Press **OK** button or press [Enter].
v. Replace cells in line 1 with "Project", ">12", ">11", ... ,">1", "<1".
u. Select and highlight ("click and drag") block A2:N11 (Note: If there are more than ten projects that require closure, change N11 to N<n+1> where n is the number of projects.)

w. Select **Data** and **Sort**. Change 1st key to **Descending**. Click **OK** button or press [Enter].

x. Select and highlight block A1:N11 to include dates.

y. Press **[Chart Wizard]** button (just left of arrow-question mark button(.

z. Move to an open area of the spreadsheet and open a graph box by clicking and dragging the mouse.

aa. The Chart Wizard window should list the part of the spreadsheet table selected in step x. Press **Next>** button or press [Enter].

ab. Select **Area** chart type and press [Enter].

ac. Select **Next>** to select format 1.

ad. Press **Next>** or [Enter].

ae. Type "**History of Open Alerts**" in the Chart Title window. Press [Enter].

af. Type "**Months Ago**" in the Category (X). Press [Enter].

ag. Type "**No. of Alerts**" in Value (Y). Press [Enter].

ah. Double click on **Graph**.

ai. Select **File** and **Page Setup**.

aj. Select **Landscape**. Delete default symbols under **Header** and **Footer**. Press **Print**.

ak. Press **OK** to perform printout.

al. Save file, if desired.

Alert Summary to cc:Mail Report

The following procedure is for distributing a summary of Alerts via cc:Mail. A password is necessary to access the EPINS and cc:Mail.

a. Capture Procedure
   1) **Log** onto EPINS.
   2) Type **4** and **[Enter]** to continue login.
   3) Type in your **EPINS name** and press **[Enter]**.
   4) Type in your **EPINS password** and press **[Enter]**.
   5) Select either Windows or Main Menu.
   6) Select or switch to **Network Applications**.
   7) Select "**4 Alert/Concern System**".
   8) Select "**2 Reports Menu**".
   9) Select "**1 Status Reports**".
   10) Select "**4 Alert/Concern Summary Report**".
   11) Set **Date of Alert** range to report period.
   12) Select **File ASCII** and press **[Enter]**.
   13) Press **[Enter]** to continue.
   14) Type in the two digits for the **month** plus **[Enter].**
   15) Type in the four digits for the **year** plus **[Enter]**.
   16) Press **[Enter]** to not update the status.
   17) Press **[Enter]** to not override.

   Note: The database will take a little time at this point to select records.

   18) Press **[Enter]** to accept file name.
   19) Press **[Enter]** to end the report.
   20) Press **[Esc] [Esc] [End] [End]** to exit EPINS.
   21) Press **[Esc]** to get to Main Menu.

b. Reformat Report (DOS Method)
   1) Select **M** and **[Enter]** for the Main Menu.
   2) Select **D** and **[Enter]** for DOS Applications.
   3) Press **[Enter]** to select Wordprocessors.
   4) Press **[Enter]** to select WordPerfect.
   5) Press **[F5]** to select directory.
   6) Type in **H:\USER\<yourname>*.ASC** to show files.
   7) Select **ALCNUR2.ASC** and press **1** or R to retrieve.

8) Press **[Cntl-F8]** to select Font.
9) Press **4** to set Base Font.
10) Cursor down to **Line Printer 16.67** and press **1**.
11) Press **[Shft-F8]** to format report.
12) Press **2** then **7**.
13) Cursor down to **Standard Wide** and press **1**.
14) Press **3** then **1** then **2**. Type **[Shft-F6]** then **ALERT SUMMARY REPORT**. Press **[F7]**.
15) Press **[Enter]** to return to the Format Menu.
16) Press **1** then **7** then **0 [Enter] 0 [Enter]** then **[Enter] [Enter]**.
17) Press **[Cntl-F5]** then **1** then **1** to save as a text file.
18) Type in **F:\USERS\ALERT\SUM*yymm*.TXT** (where *yy* is the year and *mm* is the month) then press **[Enter]**.
19) Press **[Shft-F7]** the **1** to print a hard copy for those persons not on ccMail.
20) Close the file by typing **[F7]** and **N** and **N**.

c. Modify Lead-in Message
1) While still in the wordprocessor, press **F5** to load the lead-in message.
2) Type in **F:\USERS\RKARPEN\GIDEP\SUMHEADR.TXT**.
3) Select SUMHEADR.TXT file and press **1**.
4) Edit the date range for the report period.
5) Press **F5**, **1**, **1**, and then type **LEAD-IN.TMP** to save to your default drive.
6) Press **F7**, **N**, **Y** to exit WordPerfect.

d. Mailing Report
1) Press **C** to go into cc:Mail. Type in password.
2) Press **P** to Prepare new message.
3) Press **M** to select Address to Mailing List.
4) Highlight **DivSafetyReps** and press **[Enter]**.
5) Press **[Enter]** to end addressing.
6) Type **Alert/Safe-Alert Summaries** and **[Enter]** for the subject of the message.
7) Press **F10** to return to the Send Menu.
8) Press **F** to attach the Lead-in message.
9) Erase the listed directory and type in:

LEAD-IN.TXT [Enter]

10) Press **F** to attach the Alert Summary file .
11) Erase the listed directory and type in:

H:\USER\<username>\ALCNUR2.ASC [Enter].

11) Press **S** to send message.
12) Press **X** to exit cc:Mail.

APPENDIX G:
DOCUMENT NUMBERING

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JPL ALERT/CONCERN NUMBERS

The JPL Alert/Concern System assigns a unique number, the JPL Alert Number, to each problem report received and redistributed, whether the problem occurred inside or outside of JPL. The originator's report number (such as, a GIDEP number, NASA Advisory number, Aerospace Alert number) is separately captured as the Source Number in EPINS.

Before assigning a new JPL Alert Number, the Alert System Engineer checks the data base to see if this problem incident had been previously logged or reported in another form, such as, a Preliminary Alert.

The general format of the JPL Alert Number is:

AC-*T-SSS-YY*

where:

AC   stands for Alert/Concern

T   type of problem per the following:

      C   Chemical (liquid or gaseous matter, corrosion, toxicity, etc.)

      E   Electrical, electronic or electromechanical parts and materials

      K   Connectors, cable and wire

      M   Raw Material (solid matter)

      P   Mechanical parts and assemblies (actuators, motors, etc.)

      R   Reliability and Quality (calibration, certification, testing, process control)

      S   Safety

SSS   number for a given calendar year assigned based on sequence in which the report was received (although follow-up reports on the same incidence would use the sequence and year of the original report on the incidence)

YY   last two digits of the calendar year for which the report was dated by the originator (although follow-up reports on the same incidence would use the sequence and year of the original report on the incidence)

Source Document Numbers

In order to identify the origin of an Alert/Concern, Source numbers are assigned to help identify the document submitted to the Alert/Concern System. The following guidelines are intended to help assign the Source Number.

a. Use the GIDEP document number on the received documents for **Alerts, Safe-Alerts, Problem Advisories** and other releases through GIDEP.

b. For **NASA Advisories**, use the NASA Advisory number, e.g., NA-001.

c. Since **MSFC** has unique 4-digit numbers assigned to their preliminary/TWX Alerts, use MSFC's GIDEP code plus that 4-digit number (e.g., Preliminary TWX Alert #6752 would have a Source number in our system as H1-6752.)

d. For documents from **JPL**, use its GIDEP participant code (E4), as follows:

   1. For Parts Failure Analysis Reports, use the PFAR log number (e.g., E4-<log number>).

   2. For Problem/Failure Reports, use the P/FR number (e.g., E4-<P/FR number>).

   3. For all other JPL documents including Form AC-100X, use date of document (e.g., E4-<yymmdd>).

e. For documents other than Alerts (IOMs, letters, etc.) from other **NASA** facilities, use the GIDEP participant code, as follows:

M6	Ames Research Center
DZ	Dryden Flight Research Facility
H6	GSFC and NPPO (unless it's NASA Advisory; see c. above)
M7	GSFC/Wallops Flight Facility
HQ	NASA Headquarters
H9	Lyndon B. Johnson Space Center
N4	Kennedy Space Center
H5	Langley Research Center
J4	Lewis Research Center
H1	Marshall Space Flight Center
CD1	John C. Stennis Space Center
QB	White Sands Test Facility

followed by a hyphen and date of correspondence in the format **GC-YYMMDD**, where the **GC** is the GIDEP participant code, **YY** is the last two digits of the year, **MM** is the month and **DD** is the day (e.g.,"E4-920702" for a JPL document dated July 2, 1992.) When the document is not dated by the originator, use the date received by Office 507 instead.

f. For documents from **other sources**, look up in Roster of GIDEP Representatives for the participant code and add date as for NASA facilities in 5. above. For reports from vendors, use "VV-".

g. When more than one problem is reported or more than one manufacturer is reported in one of these documents, you should individually identify them with a dash-number, such as, E4-920702-1, E4-920702-2, etc.